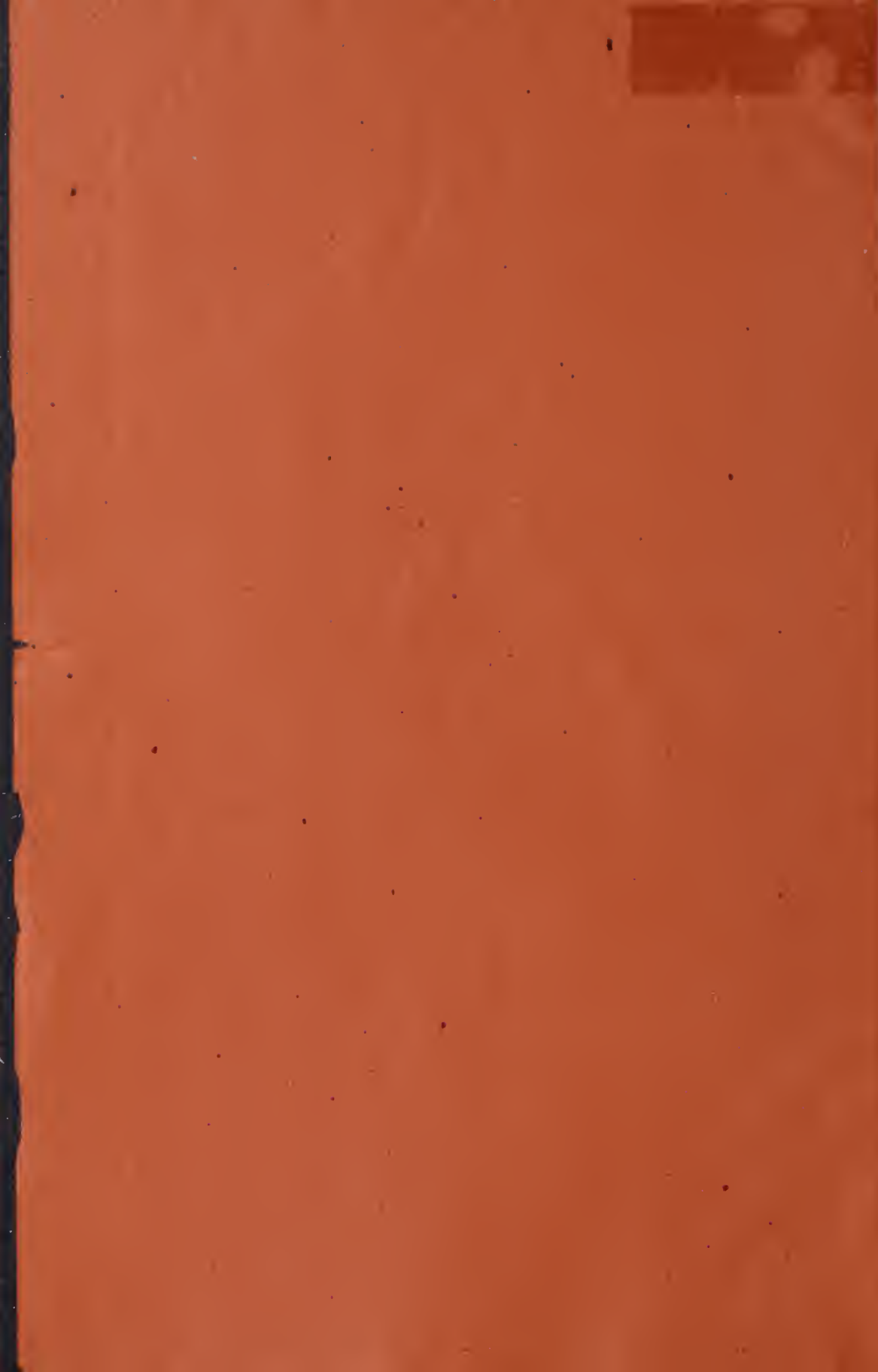


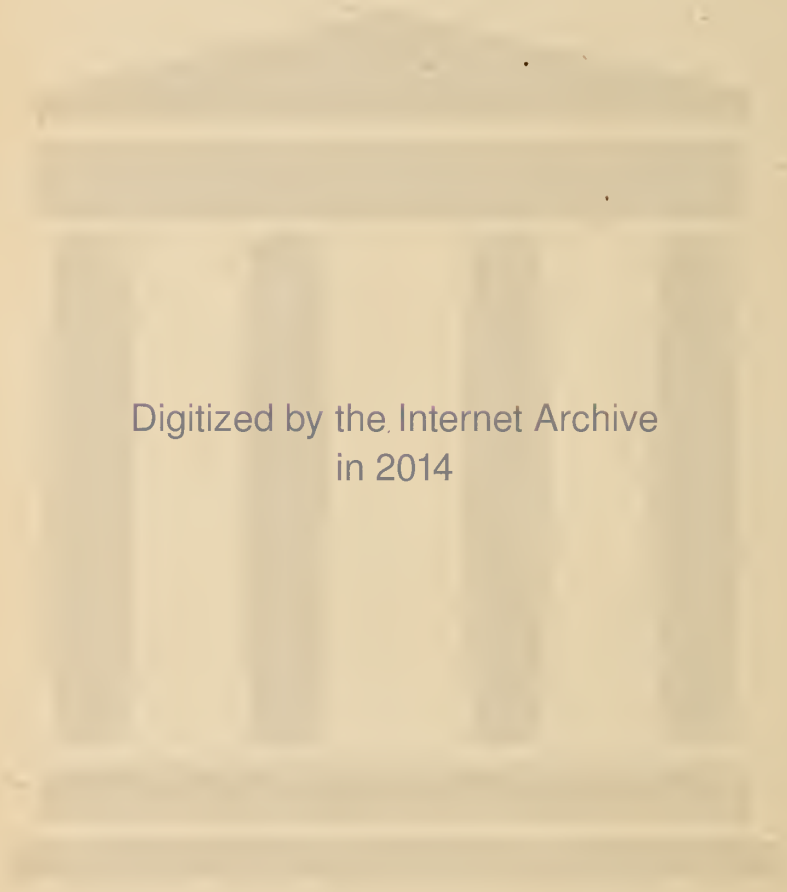
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*BIBLIOGRAPHY OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS,—IN THREE PARTS,
MEDICINE, SURGERY, DISEASES OF
WOMEN AND CHILDREN
AND OBSTETRICS.*

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1884.

NEW YORK:

H. CAMPBELL & CO., PUBLISHERS,

140 and 142 NASSAU STREET.

Entered according to Act of Congress, in the year 1884, by the
AMERICAN MEDICAL DIGEST PUBLISHING COMPANY,
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PRINTED BY P. F. MCBREEN,
61 BEEKMAN ST., NEW YORK.

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THE AMERICAN MEDICAL DIGEST.

PART I.

MEDICINE.



THE AMERICAN MEDICAL DIGEST.

1884.

M E D I C I N E .

CONSTITUTIONAL DISEASES.

Typhoid Fever.

Dr. JUDSON BRADLEY thus concludes an article published in *Detroit Lancet*:

Diagnosis.—When one has ascertained the facts of the clinical history of such a case the diagnosis is made, but as the clinical history cannot be ascertained in its totality at the onset, the positive diagnosis may be delayed some days in certain cases. Yet when the temperature, the pulse, the tongue, the bowels and the skin are interrogated, the diagnosis need not usually be long delayed. Typhus fever as seen on the coast and on shipboard is almost never seen here; while remittents are quite distinctive, from the higher temperature at the onset and the complete remission which renders them amenable to prompt treatment.

Then if we have a fever of continued character, which has had a formative stage of seven to fourteen days, with headaches, bleeding of the nose, diarrhœa with ochre-colored dejections, tympanitic distension of abdomen and iliac

tenderness and gurgling, and after a number of days—from the seventh to the twenty-seventh day of the disease—the characteristic rose-colored spots, we may safely make a diagnosis of typhoid fever. By the time—in the course of such a fever—that the diagnosis is sure, we shall probably have considerable delirium, especially at night, and coma may have supervened as early as the rose spots make their appearance; yet neither delirium nor coma is absolutely necessary to the diagnosis, for the fever may run its course without either: in fact, with general absence of brain symptoms.

The local affections liable to mislead one in making diagnosis of this fever are meningitis, bronchitis, pneumonia, acute tuberculosis and true inflammation of the bowels. A little care will easily discriminate and distinguish between the general fever and these local affections. Great reliance has been placed upon the thermometer as an aid to diagnosis, but the rule laid down in regard to gradual increase each day and finally a temperature of 103° Fahr. by the end of the second week is often vio-

lated, as will be seen by inspection of the charts, which are copies of charts taken by the surgeons of the Marine Hospital in this city and kindly loaned me to copy.

Prognosis.—In the majority of these cases a favorable prognosis may be made, and in general, so long as ataxic symptoms do not manifest themselves, but a guarded prognosis is most safe, at the beginning of the sickness. Recovery may be had in very grave cases, and death may end the treatment in comparatively mild cases very unexpectedly.

Statistics are not at hand to determine the death-rate in this particular fever. The number of deaths can be ascertained at the health office, but the whole number of cases occurring in Detroit and vicinity can only be conjectured. The death-rate at the Marine Hospital during two years last past has been 7 per cent. plus a small fraction, *i. e.*, 56 cases and four deaths. (Statistics kindly furnished by the surgeon-in-charge.)

Treatment.—There is no specific for typhoid fever; neither can you shorten the normal course of the fever by special medication except you shorten the life of the patient and terminate the course of the fever by the termination of the individual life.

Opium in full doses, and the various salts of quinia in full, and sometimes heroic doses to abort a typhoid have been tried so often and so often have utterly failed that it would seem that men would learn wisdom by the experience of others and not continue to repeat these experiments, especially as it has been repeatedly shown that patients subjected to the quinia treatment have a more tedious and prolonged convalescence.

Failing in special therapeutics, then, as there is no specific against the typhoid poison the treatment will become largely

symptomatic and expectant. We may give bromide of potassium or sodium for head symptoms and general restlessness; may give aconite, gelsemium and liquor ammonii acetatis as a means of lowering the temperature, which combined with tepid sponging several times during the day will conduce much to the personal comfort of the patient.

The alimentation should not be neglected. Milk is the best diet, or perhaps I should say that milk and some form of alcohol, as whisky or brandy, combined, or taken alternately, constitute the best diet. In mild cases the alcohol may be omitted and dependence placed upon milk; or albumenized milk may be partly substituted for pure milk. Beef-tea if well made is worth something, but as most commonly made is next to starvation for the patient. When the stomach is in good condition, eggs may be given moderately with safety.

Later in the progress of the case, the abdominal tenderness may increase and, the ulceration may perforate the bowel, when the patient will most surely die from the induced peritonitis. Again, instead of perforation of the bowel the ulceration may induce hemorrhage which at least will be troublesome and may be fatal. The various astringents—vegetable and mineral—are used to control these hemorrhages. Latterly ergot has been highly praised as a hæmostatics in these cases. Frequently nothing avails to check the hemorrhage.

Tonics are essential in the treatment of these cases in moderate quantities only. If the tongue is red, quinia in stimulating doses makes the patient worse.

The diarrhœa of typhoid fever is best modified by astringents and opium or the turpentine emulsion which also contains opium. It is not best to confine the bowels as the diarrhœa seems

to be eliminative ; in fact it sometimes seems necessary to the comfort of the patient if not too profuse.

Bronchitis or pneumonia as a complication of typhoid fever needs attention but does not bear depressing treatment. Pneumonia is apt to be a serious complication, and quite often enables death to claim the patient as his own.

During convalescence, alimentation is to be watched closely. A full meal of rather indigestible food frequently induces a relapse and a sudden death.

If the coma which sometimes supervenes in these cases is caused by deficient elimination of urea and constipated bowels, a hydragogue cathartic may be given safely and it will relieve the head symptoms to a great extent. Coma vigil may be relieved by the bromides or chloral hydrate. Malt liquors may be substituted for distilled liquors during convalescence, when less alcohol is required. Plenty of pure air is necessary to the successful treatment of these fevers ; and during convalescence moderate exercise in the open air is not objectionable as soon as the patient is able, but at first it must be very moderate.

All in all, typhoid fever is one of the self-limited fevers, and when uncomplicated can most often be brought to a successful termination by careful watching and prudent medication.

I have already hinted at some of the differences which appear between the cases of typhoid fever that I have treated and the fever of the books. To be more succinct, the differences may be stated as a higher initial temperature sometimes as high as 106.5° Fah., less of the brown tongue, little if any of the iliac tenderness and tympanitic distension of the abdomen, and frequent absence of the rose colored spots ; and yet these fevers run their courses to all intents as real typhoid fevers.

Treatment of Intermittent Fever by Electricity.

The following is an abstract of an article by Dr. WM. R. D. BLACKWOOD, published in *Med. Bulletin* :

Faradic currents were used principally, but in those having large "ague-cakes," galvanism was also applied at the close of the sitting, not from any attempt to control the disease, but because the reduction of glandular hypertrophy is, in curable cases, more readily secured by constant currents. The first application was always in the morning, between eight and nine, and—if I unfortunately did not sleep—better, between four and seven A. M. ; and, it is worth mentioning, before that, I would, patient permitting, have started them at five, for I always have better results from quinia by getting the first dose in before or shortly after daylight. A current readily borne was passed first—one pole over the solar plexus, the other over the liver, before and behind, for five minutes ; and then over the spleen for five more. After that, about five minutes were spent in general faradization of the abdomen and spine, particular stress being laid in those suffering from obstinate constipation to stimulate the colon and rectum by the method adverted to in a paper by myself on the treatment of constipation, read before the Philadelphia County Medical Society, April 25, 1883.

When galvanism was employed, a current of from fifteen to twenty-five milliwaters was sent as directly through the spleen as could be attained, although, of course, the unavoidable lateral diffusion was encountered. This current was direct, uninterrupted, and of five to fifteen minutes' duration. Although the induration was promptly reduced by galvanism, no effect was perceptible as to its relieving the intermittent, unless

it be granted that enlarged spleen is not positively *consequent* upon chill and fever, but may be an integral part of the disease from the beginning, although undetected, or that the original *cause* of the malady may be intimately connected with functional disturbance of that mysterious organ, whatever its real function may be.

In the tertian and quartan cases, with few exceptions, treatment was made once daily, without reference to the hour of invasion of the chill. The exceptional instances were for the purpose of testing the utility of repeated doses, and, as might be expected, the result indicated the advantage of two or even three applications daily. The quotidian cases were seen twice each day.

The result of treatment was favorable in all cases, a cure resulting in from six to thirteen days. The most stubborn case was a quartan, the chill returning with full force four times before being checked. Twelve of the tertian subjects had no return after the first application, seven had one chill, and three two chills after commencing electrization. The returning chills were always in children.

The result, in every way, of treatment by electricity compares favorably with any other method. Quinia, our sheet-anchor, is expensive (at least in the doses I find necessary); it is disagreeable to take, especially by children; it does not always cure the disease, without producing results not wanted, and these are not always transient. Tinnitus-aurium frequently persists long enough to worry the patient, particularly if he be a lawyer, or otherwise dependent upon an acute sense of hearing. Deafness has once in a while resulted from large doses of the drug, and ocular disturbance has been credited to the same cause. These disasters ought to be

avoided if possible, and in many cases it might be worth while to look into the matter as I have outlined.

I do not see much intermittent now, and I do not use electricity solely in all those coming under my care, but it is my habit to finish up the case, so to speak, by a few applications, if the patient is willing to let me.

One disadvantage is that the patient must come to the office for treatment, because, although faradic electricity can be obtained readily from any good machine it must be applied by a person capable of properly managing it. The popular idea is, the more you take the greater the good; a palpable mistake here, just as it would be with strychnia, jalap, or ipecacuana. Besides this, care is required that the current reaches the solar plexus of the sympathetic, instead of being expended on the parietal muscles of the abdomen only. A good many little points are to be looked after in medical electricity; it cannot be manipulated hap-hazard, and the difference in result in cases amenable to treatment by this agent in the hands of one physician and another equally capable, other things considered, is that the one clearly understands the motor points—the landmarks as Holden terms them, and can thereby reach important internal organs, whilst the other aimlessly wanders over the region and beyond, producing peripheral irritation, which is just as likely to do harm as to do good; he makes no impression whatever, beyond that exerted on the imagination of the subject under treatment. It is thus that electro-therapeutics has lain under a cloud, for few men have given it the needed study. Another obstacle to the successful handling of cases is that people generally are indisposed to give the remedy a fair trial, and others dislike or cannot bear

through idiosyncrasy the necessary applications.

On the other hand we gain by electrical treatment decided curative action in hepatic and intestinal torpor without loading the stomach (already weakened) with nauseous drugs ; and all who have had extended and successful experience with intermittent know well the necessity for an active condition of the viscera named. Many a case in which quinia fails at first, or actually does harm, is readily controlled by associating the antiperiodic with a little blue mass or podophyllin. Again, when properly employed, with most persons electricity is pleasant in action, and it avoids large expenditure for drugs, an item worthy of consideration in families of moderate incomes. Further, relapses have, at least with myself, been infrequent, decidedly more so than when compared with other plans of treatment; and this is certainly an advantage, for now and then patients get discouraged and drop their family physician in the hope that another may work a radical cure.

I am not by any means convinced that intermittent or paludal fevers are caused by germs received from without the body, these germs coming from nobody knows where ; and I have always, since working out results on my own account, had an idea that it was possible that perverted functions or innervation of the liver, spleen, skin, or it might be another organ, was intimately concerned in the production of *febris elodes*, and that, therefore, agents likely to stimulate normal action in the more important abdominal viscera, with, at the same time, a tendency to stir up the central sympathetic, would be valuable. Many drugs will act on the glandular organs named, but their effect on the nervous trunks is *nil* or next to it. Elec-

tricity will undoubtedly stir up the whole of them at one and the same time, and with me it has met fairly the objective point therapeutically considered. I propose going further into the experiment as occasion offers, and I suggest the idea to those gentlemen who know the value of electricity in medicine and use it—an agent falsely termed an imponderable fluid, but which being imponderable has no weight, and cannot, therefore, be a fluid, for fluid *is* matter and *has* weight. Electricity is by the dynamic theory simply an expression of energy or force; and, although electricity is not life, it is beyond question closely allied to nervous force, and without nervous force we cannot live.

Glycerine in the Treatment of Acute Febrile Diseases.

Dr. MARIANO SEMNOLA, Professor of the Faculty of Medicine, Naples, has an article on this subject in *Bull. Gen. de Therap.*, of which the following is an epitome :

In the treatment of fevers, generally speaking, we are at a loss for any curative agent capable of acting at once upon the cause and origin.

If we except quinine in the treatment of paludal fevers, we can only modify the temperature in infectious fevers by the application of cold, and calmly look on while the poison exhausts itself in the system, during which time the system itself becomes exhausted; and we must therefore recognize the importance of finding some substance capable of storing up strength and preserving it. It is unnecessary to recall a practice already in vogue with this view in some European schools, consisting of alcohol as the fundamental treatment of some fevers, typhus, pyæmia, and the exanthemata. The antipyretic action of alcohol

is not favorably viewed here, although it has been in high repute by some of the most eminent men of the present day.

I am of opinion that the action of alcohol is simply a toxic action, as I demonstrated before the International Congress of Brussels, an action, toxic like so many other reputed antipyretics (such as digitalis, phenic acid, etc.), which poisons the patient, and those organs or tissues which are the necessary instruments of the febrile manipulation. In this way the patient combats with two poisons, the one being that of the fever proper, and the other that of digitalis or other substance prescribed; and thus he succumbs under the two more rapidly than he would under one.

The deeds and clinical records of these blind and incensed fanatics have fully proved to me their error.

In 1869, I denounced their practice, and was regarded as a blasphemous anti-progressist. I would add now for the sake of those young practitioners who allow themselves to be carried away by these dangerous utopian ideas respecting salicylic acid, phenic acid, iodoform, etc., which are the fashion of the day, that such applications are all illusions. These must either be employed in homœopathic doses, and thus imitate the prescription of a quack or charlatan, or they must be employed in proportion indicated by scientific experience to destroy the infections (microbes), in which case both would be destroyed, the germs and the patient. This was well illustrated at a theatre, where the clown acting as doctor was asked a sure and efficacious remedy for headache. The answer consisted of four words: "Cut his head off." What irony for certain progressists; but what a lesson. Well, to return to the storing up of aliments. Although the use of alcohol cannot always be doubted

on the other hand it presents grave objections to its general use, by its exciting action upon the heart and brain, which sometimes renders the preëxisting condition worse, and brings about a cardiac catastrophe due to exhaustion of the heart consequent upon over-sustained excitement. This is not all. The gastric mucous membrane, already irritated, is made more so by the alcohol, and the digestion materially impaired. In consequence of this I have entirely abandoned it in my practice, and I have searched elsewhere for a substance that might answer the same purpose without any of its drawbacks. I selected glycerine for this, because I considered its chemical constitution warranted the supposition that as a substitute for alcohol it would afford to patients a better resistance against the exhausting action of the fever; my anticipations were soon crowned with excellent results.

I use glycerine diluted with water in the proportion of glycerine, 30 grammes; citric acid, 2 grammes; water, 500 grammes; or lemon juice to flavor; mix. Of this I give about an ounce every hour.

My rule for beginning its use is when the temperature reaches 104° Fahr.

Some time after the glycerine has been taken the quantity of urea diminishes, in two cases to the quantity of 10 grammes (3 iiss) in the 24 hours, but generally only to that of 6 or 7 grammes. Upon the suspension of glycerine, the urea immediately increases in amount.
—*Med. Age.*

On Personal Precautions that may be adopted by Medical Men whilst attending Cases of Infectious Disease.

Dr. CHARLES GREEN makes these suggestions in the *Lancet*: 1. Always have the window opened before enter-

ing the patient's room or ward. 2. Never stand between the patient and the fire, but always between him and the open window. 3. If possible, change your coat before entering the room. 4. Do not go in for unnecessary auscultation or other physical examination. 5. Stay as short a time as possible in the room. 6. Never, while in the room, swallow any saliva. 7. After leaving the sick room, wash the hands with water containing an antiseptic. 8. Rinse out the mouth with diluted "toilet Sanitas" or Condy's fluid, also gurgles the throat with it, and bathe the eyes, mouth and nostrils. 9. Expectorate and blow the nose immediately on leaving the sick room. 10. Keep up the general health by good food, exercise, and temperance. 11. In addition to the above recommendations, which are all pretty generally known, I would suggest another, which is, in my opinion, the most important of all. This is to filter all the air you breathe while in the sick room or ward, through an antiseptic medium. My method is to use a McKenzie's inhaler over the nose and mouth. I carefully soak the sponge in a strong solution of carbolic acid before entering the sick room. It is so made that all the air breathed must necessarily come through this sponge, and the expired air is emitted by a valve action at another place. I have worn this not only in the Fever Hospital wards, but in many of the typhus dens in this borough. It is to this method that I attribute the fact that although I have attended between 200 and 300 cases of typhus during the last twelve months, and seen many more, I have hitherto escaped infection myself. The only objection (which is not of much importance in a hospital) is the unsightly appearance one has with the inhaler *in situ*. This objection is, however, a very slight one when weighed

against the greatly increased safety one not only feels, but I believe actually possesses. I am not aware of this method having been mentioned previously; and this fact, and my desire to prevent a repetition of the late disastrous fatalities, must be my apology for bringing it before the profession.

Spiritus Ætheris Nitrosi.

Dr. D. J. LEECH, professor of materia medica and therapeutics in Victoria University, in a recent paper (*Practitioner*), expresses the opinion that the very general lack of confidence in the efficacy of spiritus ætheris nitrosi arises from ignorance of the physiological and therapeutic action of this drug. His experiments have convinced him that its effects are more distinct and less transient than they are generally supposed to be. Its properties depend on the nitrous ether (nitrite of ethyl) it contains (from three to four per cent. when pure). The action of nitrite of ethyl is analogous to that of nitrite of amyl, of nitroglycerin, and of the nitrites of the alkaline metals, "but, contrary to what might have been expected, the influence of the drug upon the circulation, in moderate doses, is of considerable duration." One hundred minims of spiritus ætheris nitrosi speedily produced, in a healthy subject, a marked fall in arterial tension, lasting two or three hours. Doses of twenty-five or fifty minims produced a similar effect, though less marked and less enduring. The fall in tension was always accompanied by increased frequency of the heart-beat. The percussion-wave in the sphygmographic tracing was heightened. Experiment proved that the action of the sweet spirit of niter could not be attributed to the rectified spirit it contained in large proportion. There was gener-

ally a notable absence of subjective symptoms, even when the fall in arterial tension was very considerable. However, large doses may cause slight throbbing, giddiness, faintness, or depression. The acceleration of the pulse is not so great as that produced by nitrite of amyl or by nitro-glycerin; small doses do not usually increase the frequency of the pulse rate very much.

The therapeutic rôle of spiritus ætheris nitrosi is mainly due to its influence on the circulation. It reduces arterial tension, in part, at least, by its power of dilating the arterioles in certain areas. Thus, probably, it acts as a diuretic. "It seems probable that any agent which increases the rapidity of the blood-flow through the Malpighian glomeruli is capable of increasing the secretion of water, and that both those agents which increase arterial tension and those which decrease it may, under different conditions of the circulation, in this way produce diuresis. Sweet spirit of niter will probably not act as a diuretic unless decrease of tension is necessary for diuresis. This view accounts for the frequency with which it disappoints the practitioner who employs it to increase the flow of urine. In cardiac dropsy, for instance, the indications for spiritus ætheris nitrosi will rarely be present; and it is in this affection that its failure as a diuretic has been specially noted. On the other hand, it usually acts satisfactorily in elderly people in whom tissue degeneration has produced increased arterial tension. The short diuretic effect of sweet spirit of niter, even when it causes increased urinary secretion, as compared with the effect of digitalis, is explained by its comparatively short influence on the circulation. The diaphoretic action of nitrous ether, like its diuretic action, is due to its effect on the circulation.

The reason the dilatation of the cutaneous vessels to which it gives rise is not always followed by perspiration is that such dilatation is but one factor in the causation of diaphoresis. It is clear that it may cause a tense, small pulse to become not only quicker, but also fuller and stronger to the feel. Moreover, the heart's action under its influence may become perceptible to the patient. These facts account for the stimulant action which it has been supposed to exert on the heart. The febrifuge properties for which it is often given are due, partially at least, to the dilatation of the cutaneous vessels it produces, and to the consequent exposure of a larger amount of blood to the air. However, they may be due also, in part, to some direct influence of the drug on the tissues; for Wood has noticed that the fall in temperature which in animals follows the administration of nitrite of amyl is accompanied by diminished excretion of carbon dioxide.

Nitrite of ethyl, the essential constituent of sweet spirit of niter, has been found effectual in averting attacks of angina pectoris. And, while spiritus ætheris nitrosi will probably never take the place of nitrite of amyl or nitro-glycerin throughout the whole spheres of their actions, yet it will doubtless prove beneficial in many conditions in which relief is afforded by the latter agents. "May it not be that our failures with it have arisen partly from the use of an impure spirit, partly from the want of knowledge as to the physiological effects on which its therapeutic uses depend; and that the use of the genuine drug in proper cases, may show us that the popular belief in the efficacy of sweet spirit of niter is founded on fact?"—*N. Y. Med. Jour.*

DISEASES OF THE NERVOUS SYSTEM.

Stammering, its Relation to Poverty and its Treatment.

Dr. BARKHAN, of Brunswick, Germany, obtained from the teachers in the public schools a list of all the stammerers, and then he examined them singly; there were 86 cases, belonging unexceptionally to the lower classes, laborers and mechanics. All these attended the lower grade schools. There were 72 boys and 14 girls. Most of them were poorly fed and clad, only 4 presenting a better physical appearance. In 24 cases, there was an abnormal relation between the form of the head and the dimensions of the chest. The smallest head was 48 ctm., the largest 57 ctm. in circumference. The smallest chest measured 51 ctm., the largest 75 ctm. Normally, the circumference of the chest exceeds that of the head 8—11 ctm., rarely 6—8 and 11—13. In the formation of the palate there were various anomalies; the great depth, and its conjugation with the form of the maxillary, and position of the teeth. He does not regard these as the cause of stammering, but as only an arrest of development which is often found with idiots and deaf-mutes, which is only a proof of their close relations. There was no evidence of heredity in any of these cases.

He proposes a plan for their education, which will require six months, 3 hours weekly.

The 37 worst cases—boys—will require three teachers, who must treat them with the utmost kindness and consideration. A physician should be in constant attendance with the teachers.

Instruction for Stutterers.—The first and second months comprise exercises in breathing. 1. 15 minutes. Inspira-

tion and retention of breath, at the same time placing the right hand under the left false ribs, for 3 seconds, gradually rising to 20 seconds; repeat this 3 times, and then rest 1 minute. Expiration 3 seconds, increase to 10 seconds; repeat 3 times, then rest 1 minute. Then keep time in inspiration and expiration; pause more or less. This must be done with absolute regularity for several minutes. Beat time like in music, accelerate or retard the breathing, pause, repeat and proceed. 2. 15 minutes, singing. 3. 15 minutes, marching and calisthenics, especially of the arms.

The third and fourth months comprise exercises of the voice. 1. 15 minutes. Repeat breathing exercises—pause 15 minutes. 2. 15 minutes. Deep inspiration, and at expiration give utterance to the vowels, a, e, i, o, u, a, o, u, first deep, then middle, then high, first 5 seconds, then rising to 20 seconds. Later, sing scales, hold the note long, gradually expand and then diminish. 3. 15 minutes marching, calisthenics of the arms.

Fifth and sixth months. Reading and speaking exercises. 1. 15 minutes breathing and vocal exercises. 2. 15 minutes, exercises in joining vowels to consonants; first the vowels before the consonants, and then after the consonants; always to be preceded by a deep inspiration. Then beating time to slow speaking. Deep inspiration before every sentence. 3. 15 minutes, beating time to slow reading; inspiration as before.

Instruction for Stammers or Stammerers.—The teacher must accurately describe the position and motions of the organs of speech, which are required for the proper articulation of the faultily pronounced letter or syllable and practice it, until it is corrected; repeat it

singly, or in combination with other letters or words; also the shape of the mouth at the vowels, the position of the lips at the consonants, the position of lower lip and upper teeth at s, c, z, etc.

The tongue must never protrude between the teeth in speaking.—*Arch. d. Psychol.—St. Louis Med. and Surg. Jour.*

The Treatment of Cramp.

Surgeon ROBERT MANNERS MANN writes in the *British Medical Journal*: "There is no remedy I have found to answer, except the raising the head of the bed. I cause two bricks to be placed under each leg, or a block of wood of the same thickness as two bricks. Patients who have suffered at night, crying aloud with pain, have found the above plan an immediate, certain, and permanent relief.

DISEASES OF THE URINARY ORGANS.

Treatment of Diabetes.

In the *Detroit Lancet*, Dr. O. C. KNIGHT says: For the past eight years I have been experimenting in the cure of diabetes. Citrate of soda in doses of half a drachm to one drachm, is an excellent remedy in this disease. It has been shown by analysis, that sugar disappears from the urine when this salt is used with the food instead of common salt. I have also found out that the alkaline salts of organic acids, when given in doses too small to produce purgative effect are absorbed, and their acids being burnt up and destroyed in the respiratory process, are eliminated by the urine as carbonates. Hence, citrate of soda may, without interfering with the gastric acid in the same way as alkaline

carbonates, place the system under the influence of an alkaline carbonate, which is indispensable to the interstitial combustion of the glucose of the food.

Diet in Diabetes.

The *Med. Press and Circular* says: Professor EBSTEIN, of Gottingen, in the *Aerzlich Vereinsblatt*, discusses at some length the subject of diet in diabetes. Cantani's method of treatment is based on the opinion that the excretion of sugar in diabetics mounts constantly in direct proportion to the quantity of food consumed, even if it be wholly composed of flesh. He promulgates the law: the patient should not eat too freely if he is to avoid excreting sugar, but at the same time he should not eat too little, lest he die of inanition. In the choice of food Cantani permits all kinds of flesh, and places no restriction on the mode of preparation; but every particle of starch and sugar is forbidden, as well as butter, as it contains a trace of sugar of milk. In the way of fat he recommends olive oil and all kinds of animal fats. He permits the largest possible quantities of the latter; to those who are thin, and whose digestive organs do not act normally, he recommends it pancreatized. M. Traube, long ago demonstrated that diabetics actually digested the greater part of the fats consumed by them.

If the sugar does not disappear after the employment of a restricted exclusively meat diet—if loss of weight does not forbid—total abstinence from food for periods of from twenty-four to thirty-six hours is to be enjoined, a similar fasting to be undergone eight to fourteen days afterwards. The sugar then disappears. In cases in which total abstinence is not well borne, Cantani gives three portions of meat broth,

pro die, each prepared from 300 grms. of meat.

Ebstein himself considers the most important point in the whole therapeutics of diabetes to be the limiting as much as possible of the quantity of food consumed. The patient should, however, suffer from feelings of hunger as little as possible. Both these objects can be attained by allowing large quantities of fat—the more, the thinner and weaker the patient is. Such treatment is not contra-indicated even in diabetes occurring in obese patients; for, says the writer, “If the the diabetic treatment be carried on with intelligence, even in the case of fat patients the excretion of sugar in the urine and the obesity of the patient will be seen to disappear, with simultaneous increase of capacity for labor and bodily strength.” Along with fresh meat and fats of good quality in the proportion of two to one, he gives cabbage, leguminous vegetables, coffee or tea (without milk or sugar), and at the most an average of 100 grms. of bread daily. Potatoes, sweets, and all kinds of starchy foods, are absolutely excluded. He does not exclude butter, as Cantani does, as he does not, like him, fear the hydro-carbons. He further recommends lard, fat, meat-broths, or the marrow of bones. He has given up the substitutes for bread; the best of them he considers to be Seegen’s improved Pavy’s almond bread. He lays great stress on bodily movement and muscular activity. He has obtained good results from riding, but quite as good from passive muscular movements, such as massage, in which exertion on the part of the patient is avoided.

DISEASES OF RESPIRATORY ORGANS.

Asthma.

Dr. PETER EADE, F. R. C. P. (*Brit. Med. Jour.*), reports a case of asthma relieved by galvanization of the neck after the failure of numerous remedies. Adopting the views advanced by Dr. Yeo, that asthma is probably an irritation and reflex neurosis, often complicated by swelling of the laryngeal, pharyngeal, or nasal mucous membrane, causing pressure on the vagus or other nerves in connection with the respiratory tract, he uses the induced current in strength sufficient to be felt. “It should be applied to the throat in the situation of the great nerve-trunks, the vagus or sympathetic, each pole being applied just below the angle of the jaw, and in front of the sterno-mastoid, and must be felt as passing through the soft palate from one side of the throat to the other.”—*Med. Bulletin.*

Needless, Useless Coughing.

In an address by CHARLES J. HARE, and published in the *British Medical Journal*, the writer has the following on needless, useless coughing:

There is in the world a great deal of what I am accustomed to call “needless, useless coughing.” Where secretion takes place into the bronchial tubes, it must sooner or later be brought up; and for this purpose some “necessary” coughing must take place, or the patient will choke. But both in organic diseases and in slight inflammatory or irritative affections of the air passages, there is often a useless amount of coughing—useless, that is, as regards bringing up any laryngeal or bronchial secretion; and far worse than useless, because it wears out the patient, prevents sleep,

and, moreover, increases the condition which gives rise to it, inasmuch as it lets the affected parts have no rest or peace. Now, the effects of opium are both local and general; and if in mucilage of acacia, or tragacanth, or in glycerine, or with a thick solution of confectio rosæ caninæ or honey, you give frequently from the one-fortieth to the one-twentieth of a grain of morphia, you not only give a marvellous amount of peace and comfort to your patient, but, where it is remediable, you tend also to cure the disease. A favorite formula of mine, varied according to circumstances, is: *R. Liq. morph. acetatis, ʒ iij; acidi nitrici dil., ʒ iss; oxymellis scillæ, ʒ vj; mucil. acaciæ, ʒ liiss; glycerini, ʒ ij; syr. rhæados, ʒ ij; aq. cinnam. (vel rosæ), ʒ vj. M.* To take one or two teaspoonfuls, five, six, or seven times in the twenty-four hours. The coughing in pertussis may be similarly relieved.

To Stop Hiccough.

The *N. Y. Med. Record* says that Dr. SHAW, of Cincinnati, states that he has often succeeded in this by following Dr. Kinnaird's procedure. "His method was to place the tips of the fingers of both hands in the position of complete supination against the abdominal muscles, at the lower and outer junctions of the epigastric with the hypochondriac regions. With the finger-tips in this position, firm and very gradual pressure is made backward and upward against the diaphragm. This pressure should be continued for some little time after the diaphragm has ceased its spasmodic contractions, when the fingers should be very gradually withdrawn."

A Simple Form of Nasal Douche.

Dr. FRANK WOODBURY, of Philadelphia (*Medical Times*), describes a medical douche which has the advantage of simplicity and cheapness. It consists of an U-shaped elbow of glass tube, to which is attached a short (about three inches) piece of ordinary rubber tubing on one arm, and a long (twenty inches) piece from the other, the latter having a hollow, somewhat conical, glass nozzle, so as to occlude the nostril when pressed into it, and keep in the fluid delivered through a central opening. The short end is also tipped with a glass tube, so as to hold it open and prevent collapsing. When not in use the entire apparatus is contained in a small paper box ($2\frac{1}{4} \times 1\frac{1}{4} \times 1$ inch), which may be conveniently carried in the pocket, or may be carried in a valise without breaking. In order to use the douche, a glass tumbler, or any similar receptacle, should have placed in it the required amount of warm water (100° F.) medicated as desired; the douche should be immersed in the fluid, and then the long tube (tightly pinched between the fingers so as to retain its contents) is drawn out of the reservoir until the glass elbow hooks over the edges of the cup, where it is self-retaining; the fluid will flow from the nozzle as long as it is depressed below the level of that in the receiver. The flow can be interrupted by simply dropping the nozzle back into the tumbler. It fulfills perfectly the purposes of a nasal douche, where such an instrument is desired. The douche may also be used for acute affections of the ear (after scarlet fever, etc.), for the eye, and generally for such purposes as an instrument of this size is adapted; among these may be mentioned the administration of milk, broth, etc., to patients unable to sit up, and too weak to drink in the ordinary way.

The advantages of this form of nasal douche are (1) its simplicity, there being no parts that can rust or get out of order; if any portion is broken it can be replaced at a trifling cost; (2) its convenience, being compact in form, occupying little space; taking but a moment to put into operation; (3) its safety, the steam being delivered without force, simply by gravity; it is almost impossible that the fluid should be forced into the middle ear; and (4) its efficacy being granted, its chief advantage is that it is the most economical douche that is in the market, its cost being insignificant.—*Weekly Med. Rev.*

Tinct. Uruguara in Pulmonary Diseases.

Several cases of chronic bronchial and pulmonary diseases in which the uruguara (didinamia angiosperma) was used with good effect are reported by M. P. MERLINI (*Med. News*). The first patient had symptoms of pulmonary phthisis; after three months and a half of treatment there was only a slight vesicular murmur. The tincture is prepared from the leaves or from the bark of the root, and is given in doses of gtt. v.-xx., three times a day, before meals, in a glass of water. The tincture is well borne by the stomach, and its prolonged use produces no digestive troubles. It causes an increase of appetite and an improvement in the general health. Merlini states that, in several cases in which cod-liver oil, iron, lime salts, etc., had given no improvement, he obtained excellent results with the uruguara.—*Ibid.*

Nervous Coryza.

Dr. JOSEPH HERZOG relates the case of a young lady of nervous temperament, and coming from a nervous fam-

ily, who suffered nearly every day from sudden paroxysms of sneezing. The nasal mucous membrane became swollen and the nose was stopped up; there was a serous, and, sometimes, later, a purulent discharge from the nostrils, lachrymation, and diminished sense of smell; the face became flushed, there was frontal headache, ringing in the ears, and sometimes a burning sensation in the throat and external ear. The entire attack lasted only two or three hours, and was usually shortened in its duration if the patient placed herself with her back to the fire. During the menstrual periods the attacks were more severe and the discharge from the nose very profuse. Nothing abnormal was to be discovered in the throat or nose during the intervals between the attacks. The injection of a weak soda solution into the nostrils was ordered, while, internally, arsenic, in increasing doses, was exhibited with good effect. The author observed the same condition, which he denominates *rhinitis vasomotoria*, in a child two years old. The child usually took a nap in the afternoon, lying in a hammock in the garden, and, whenever he did so, would be awakened by a strong fit of sneezing accompanied by a nasal discharge, lachrymation, and all the other symptoms of severe coryza. The attack lasted about two hours, and did not occur if the child was put to sleep in the house. Dr. Herzog regards the affection as a vasomotor neurosis, and thinks that it arises in individuals of nervous disposition in consequence of some peripheral irritation, which, by reflex influence, excites the vasomotor nerves of the nasal cavity to greater activity. As a consequence, there is increased afflux of blood to the parts, giving rise to swelling of the mucous membrane and increased secretion.

The author states incidentally that hay-fever is also a nervous coryza, and that the asthma accompanying it is of reflex origin. The treatment consists, locally, in the application of any of the commonly employed remedies. Internally, the author recommends the vasomotor remedies, aqueous extract of ergot (9 to 13 grains per diem, in pill form), atropine, and especially Fowler's solution (3 to 10 drops, 3 times a day). Other drugs may be used, as quinine, cannabis indica, iron, zinc, bromide and iodide of potassium, and the salicylic preparations. Sea-baths, cold water applications and electricity may sometimes be of service.—*Allgemeine Medicinische Central-Zeitung*.

DIGESTIVE TRACT.

The Treatment of Atonic Dyspepsia.

In an article on atonic dyspepsia (*Medical Record*), Dr. J. MILNER FOTHERGILL thus discourses on the question: What is it which needs improving, the assimilation of hydro-carbons or the assimilation of albuminoids, or both?

"This is a matter too little insisted upon. Too commonly, action is taken rather blindly, and malt extract (diastase), or pepsin, or pancreatic preparations prescribed, without that discrimination which is so desirable. My own rule, so far as it is formulated, and it needs some corroboration (possibly some correction), is taking the following direction: When the patient is spare and too thin, then starch and sugar are indicated, and diastase should be added to farinaceous matters. Surplus sugar is laid down in the body as fat, that is, within the storing capacity of the organism. Then when there is any tendency of glandular degeneration, and

that growth of lowly connective tissue spoken of commonly as tubercle, the indication is some fat, which can be assimilated, of which cream, butter and cod-liver oil are the most digestible forms. When it is desirable to increase the power of assimilating fat, there are several measures which may be adopted, singly or together. There are agents which stimulate the flow of bile, which emulsionizes fat so that the pancreatic secretion may further act upon it; and the most useful of these is ipecacuanha. Ether has been found to stimulate the flow from the pancreas, and so aid materially in the assimilation of fat. It might be given with liquor pancreaticus and cod-liver oil. Sometimes when cod-liver oil is not assimilated, it is well to resort to the following plan: The oil is observed unchanged in the stools, *en masse*, never having been divided into an emulsion. Here it is well to remember that a fatty acid helps in the emulsionizing of fat. So give some castile soap, say two grains, with two grains of dried ox-gall, in a pill, about two hours after a meal, when the contents of the stomach are passing into the duodenum. The fatty acid and the bile assist the natural efforts, and then the assimilation of fat is often materially aided.

Regarding indications to be gained from the appearance of the tongue, the author remarks:

In very acute conditions, it may become necessary to give milk and milk gruel already largely digested by the addition of liquor pancreaticus, or these may be given at times with ordinary milk and seltzer water, or lime-water at other times in the day. Such are conditions where there is much gastric irritability with vomiting, and a tongue denuded of epithelium or seen to be covered by a growth of young

epithelium. This condition is not uncommon in the course of phthisis, and when it shows itself it requires its own peculiar treatment, all others being abandoned for the time at least. Here the line to be taken is that of alkalies and bismuth, with or without some hydrocyanic acid. Whenever the tongue is raw or bare, then alkalies are to be given, and acids carefully eschewed. If the reader has doubts about the last, let him just try the experiment with his eyes open, and watch it. It will not be long before the results will be apparent to him. Bismuth with soda in calumba is the old and well-known combination for such state, and with it the milk dietary just described may be combined. More commonly, however, a less grave and acute condition is found where the state of the tongue is just the opposite, namely, covered with a layer of dead epithelium. Here, acids are not only unobjectionable, but are very useful. Indeed, soda sulphate with some acid is the combination which gives the most satisfactory results. Under this, the tongue soon cleans, the appetite returns, and the stools are of normal color. When the *primæ viæ* are once more acting normally and in a healthy state, then, and not till then, may some chalybeate be given. But as long as the liver is in any way disturbed, chalybeates are useless, and usually disagree. When the appropriate time comes, then iron is useful, but however impatiently the time is awaited it is well to be patient. To resort to iron prematurely is a very common mistake. Sometimes when the tongue is placed in a side light a yellow shade can be detected, and so long as that remains so long must chalybeates be withheld.

Among hepatic stimulants he places more dependence on ipecac than on

mercury, arsenic, euonymin, baptistin, iridin, leptandrin, or any other of the so-called cholagogues. Of this he says :

A century of experience tells of the utility of ipecacuanha in indigestion. It was a constituent of the dinner pill of the last century. Not only does it stimulate the liver, and so be useful in cases of indigestion where there is either bile acids formed in excess or lithates present (that is, the peptones which find their way into the portal vein from the intestinal canal, and which, converted into proteids, are elaborated into the albumen of the liquor sanguinis by the liver normally, are transformed instead into bile acids or urates ; the patient loses flesh, and on a flesh dietary only makes more bile or more lithates without gaining weight), but ipecacuanha is a "pepsin persuader" from its action on the gastric lining membrane with its multitudinous glands and follicles. Ipecacuanha combines properties, indeed, as does no other agent, in my opinion. Then there is often atony, either general or in the bowel ; and, for this, strychnia is an admirable remedy. Perhaps, too, flatulence, for which a carminative is indicated. Then there is the vehicle which may or may not be a laxative, according to the case. The pill would stand then somewhat as follows :
R. Strychniæ, gr. 1-20 ; pulv. ipecacuanha, gr. 2-3 ; pulv. piper. nig., gr. iss. ; ext. gentian, gr. i.

A Vegetarian Diet.

Dr. JOHN H. TRENT, of Brooklyn, N. Y., writes :

During the winter of 1873-74, a number of students, myself included, resolved to test personally the effects of a purely vegetable diet. We excluded all kinds of meat, oils, butter, fats, cheese, sugar,

syrups, milk, tea, coffee, cocoa, chocolate, salt and pepper; all kinds of spices and condiments; all kinds of spirituous and malt liquors, yeast and baking powder. Our diet consisted of vegetables, fruits and cereals. Whole wheat or Graham flour constituted the bulk of our diet. This was made into bread by the addition of cold water; air was forced into it by a prolonged beating with a spoon. In this way a fairly light bread was produced. The great majority of the physicians of to-day would condemn such bread as unfit for human food, yet our stomachs did not rebel. Corn, oat and wheat meal was made into pudding for breakfast, to be eaten with stewed fruit if necessary.

By the absence of salt in the cooking and preparation of our food, we were never thirsty, except after violent exercise.

We all changed abruptly from a mixed diet, with an occasional glass of beer, to the above exclusive bill of fare, without suffering in the least from ill-health; in fact, several of our number gained flesh. I doubt if any of our most intimate friends, who were not apprised of the fact, would have suspected that we had made any change in our mode of living.

The imaginary need of the chloride of sodium was intense, and most difficult to overcome. This need existed only in the mind, as the body did not suffer in the least by its absence. After a few weeks, this longing for salt subsided, and we could appreciate and enjoy the inherent taste of the food.

Our experiment extended over six months, and for some of the party much longer; prolonged through choice.

Several of us were strictly continent, but the normal seminal emission would occur during sleep, about every two

weeks, the same as under a mixed diet. I am satisfied that there was no diminution in the sexual feeling or power, as some writers have asserted. Our bowels moved with unfailing regularity.

Mental susceptibility was the same as under a mixed diet of nearly one-half meat.

It is both interesting and instructive to know that man can actually gain flesh, maintain good health and spirits, on a diet exclusive of all kinds of meat, fats, milk and salt. It proves conclusively that chloride of sodium is not an essential element in the food of man, only as it exists in its natural state and combination in cereals and vegetables.

The assertion of Dalton, "that the consumption of chloride of sodium is based upon an instinctive desire for a substance which is necessary to the proper constitution of the tissues and fluids," is certainly doubtful in the light of the above results.

We think it fair to assume that man can thrive on almost any kind of exclusive diet, such as rice, corn meal, oat meal, wheat meal, milk, beans and potatoes. And he can abruptly change from one to the other, and from either to the most elaborate mixed diet, without the nutritive process suffering in the least.—*Med. Age.*

Hydriodate of Hyoscin

Is recommended by Dr. FRAENTZEL (*Med. News*) in the treatment of the night-sweating of phthisis, in subcutaneous doses of half a milligramme (one one hundred and fortieth of a grain) or in pill beginning with the same dose. He does not find it so universally beneficial as atropine, and it sooner exhibits a narcotic action; but he has seen good results from it in cases where atropine has proved useless, or has failed to act after being in use for some time.—*Weekly Med. Review.*

CONSTITUTIONAL DISEASES.

The Treatment of Violent Delirium in Fever Cases.

DR. J. W. ALLAN (*Lancet*): The management of violent delirium constitutes one of the most difficult tasks of those having the charge of fever cases. The following remarks are meant to apply to typhus and enteric, and to severe attacks of delirium in these diseases.

Mild muttering delirium clearly does not call for active treatment ; it is best met by such gentle measures as shaving the head, applying evaporating lotions to the scalp, sponging the skin with lukewarm water and vinegar, etc. Even that form of delirium, common in typhus, in which the patient insists on getting out of bed to go to his work, etc., may generally be controlled easily by a skillful nurse, who has only to use persuasion and gentle restraint to keep the patient in order. Sometimes such cases insist on sitting on a chair by the fire or going round the ward on a tour of inspection, and I have known an old and experienced nurse gratify these whims with the best possible result. The patient gladly returns to bed after the exertion, feeling tired in body but satisfied in mind, and frequently falls into a refreshing sleep. Of course such liberties could be accorded in certain cases only, and under the personal supervision of an old experienced nurse. The cases which are difficult of management are those in which the delirium assumes a wild or fierce character. The worst cases of all are those in which there is pulmonary complication. When a muscular young man is seized with violent delirium at an early stage of illness, before his strength has been seriously impaired, great trouble is usually in store

for those in charge. As a rule the patient is in a state of terror or apprehension. He thinks that he is in danger of being murdered, or he believes that he is about to be consigned to hell fire. He is simply desperate, and this constitutes the great danger of the case. Sometimes he is cunningly planning his escape. At this stage he must be closely watched. There is a peculiar look about the eye, not easily described, but once seen readily recognized again. There is also change of manner, questions are answered abruptly, or an obstinate silence is maintained. The man is in a dangerous state ; a violent attack may occur at any moment. Every trivial action, every careless word of the attendants, has for him a sinister meaning. Without warning he may spring from the bed and dash through a window. The probability is that the patient has not slept for some time, and recognizing his dangerous condition, the medical attendant is naturally anxious to administer a draught, so as to secure deep, refreshing slumber. But, to his great annoyance, the patient absolutely and doggedly refuses to swallow a drop, and for the very good reason that he believes an attempt is being made to poison him. This reminds one of the notions of the insane ; and there can be no doubt that the delirious patient is temporarily insane. It may be that the attempts to get him to swallow the draught have roused the man to active resistance, and his violence may be so extreme as to necessitate the help of several persons and the application of mechanical restraint. The latter should never be resorted to when it can possibly be avoided ; but when it must be employed, let it be done quickly and effectively. Plenty of help should be obtained, for if the patient is strong, and one or two persons try to put him

under restraint, the result may be a severe and prolonged struggle between the patient and attendants—an exasperating kind of exertion, which is bad for all concerned. The patient should be gently but firmly overpowered, when, as a rule, feeling helpless, he will submit. The “jacket” and “sheet” should then be employed, great care being taken to make sure that the long sleeves of the jacket are bound firmly round the patient’s wrists, otherwise he will withdraw his hands and soon set himself free. When the jacket and sheet have been properly adjusted the patient is secure, but it is not desirable that he should be kept tied up a minute longer than is necessary. If he still refuses to swallow the draught, what is to be done? A hypodermic injection of morphia might be given, but I confess to a prejudice against this practice in fever cases, from a fear of causing local irritation, boils, etc., and besides, the pain inflicted by the thrust of the needle, though slight, would confirm the patient in his belief that he was in the hands of the enemy.

I find the following method to work well: Morphia suppositories are administered till the patient becomes quiet and drowsy. He is then manageable. The jacket and sheet can be removed, and warm, dry flannels, etc., put on. The probability is that he can now be got to take a draught, or at least to swallow passively. If he still refuses, morphia suppositories can be administered as required. As to the nature of the draught, I may state that I adhere to the hydrate of chloral, long ago tried and recommended by Dr. James B. Russell, in the treatment of fever cases. When there is simply insomnia, twenty or twenty-five grains of chloral hydrate in syrup (repeated, if necessary, in an hour), generally secures good sleep for

an adult. When, however, there is violent delirium, the addition of five or ten minims of solution of muriate of morphia causes the end in view to be more rapidly and effectually attained. But this combination of chloral and morphia is well known to be a formidable one; it requires to be carefully administered, and the effects must be closely watched. When the narcotics require to be given for a long time on account of persistent delirium, it is convenient to prescribe a mixture, each dose of which contains ten grains of chloral and five or ten minims of solution of muriate of morphia, the interval between the doses being determined by the effect produced. Respiratory embarrassments, lividity of nails, etc., are serious contra-indications to the use of narcotics. When suppositories and draughts have both been given in a case, this should be well borne in mind so as to estimate the combined effect. In the treatment of violent delirium in fever, narcotics wisely given may save life; improperly given, they may hasten, or even directly cause, death. In prescribing them, no routine practice can be adopted, and their administration demands the most careful personal supervision of the physician in attendance.—

The Therapeutics of Diphtheria.

BY DIFFERENT AUTHORITIES.*

ALFRED STILLE. — *Local.* — Ice in mouth and on neck first stages. Alum or tannin by insufflation; muriatic acid by a brush; potassium chlorate; tincture iodine; lactic acid is a good solvent of the membrane; carbolic acid; potassium permanganate. *General* treatment is the indication, as the membrane will return till the cause is removed. Emetics may be advantageous in the early stage. “Supporting of na-

ture is the only way to treat ;" nature will eliminate the poison ; in grave forms, stimulate ; alcohol and stimulant doses of quinia ; tincture of chloride of iron is absorbed, constricts the blood-vessels, and previous exudation ; food is the greatest of all indications ; opium diminishes waste and nervousness ; it also aids in the appropriation of other stimulants ; alcohol can be borne in large doses ; fluid beef, milk, farinacea ; Huxham's tincture. In cases of medium intensity, give tonics rather than stimulants. Tracheotomy is fatal in about three-fourths of the cases. It is advisable under favorable circumstances.

J. SOLIS COHEN.—The two main indications consist : 1. In keeping up a supply of nourishment and stimulants, and 2. In providing for the detachment and discharge of the morbid accumulations when they threaten to occlude the air-passages. The sick room must be systematically disinfected. This is done by the free use of sprays of carbolic or sulphuric acid. Solutions of the sulphate of iron or some other disinfectant are kept in all the vessels which are brought into the sick room to receive the discharges, the soiled clothing, refuse food, and slops of the patient.

He regards the chlorine compounds as of more efficacy in diphtheria than all other remedies. Of these he prefers the tincture of the chloride of iron, which must be administered at frequent intervals and in large doses—from five to thirty drops, according to age and vigor of patient, should be given from every half-hour to every second hour as the case may be. It is given in glycerine and water, or in diluted syrup of lemon. Dr. Cohen prescribes chlorate of potassium very frequently in this disease—in the form of *chlorine* mixture (made of an equal number of grains of

the chlorate and of drops of hydrochloric acid, in plain or aromatic water, or in the infusion of quassia). He always suspends the use of this remedy when there are any symptoms of renal irritation produced by it.

He administers the hydrochlorate of quinia (in preference to the sulphate) as a tonic, antipyretic, neurotic, and antiseptic. It is to be given in decided doses. When deglutition is painful it is given by enema, with proper augmentation of the dose.

Alcohol, in the form of strong wine, or as brandy or rum, is regarded as of the utmost importance when the system begins to give way. It should be given after the earliest manifestations of decided loss of vigor. At this stage it is of more importance for the time being than any remedial agent. From $f \frac{3}{4}$ ss. to $f \frac{3}{4}$ j. of brandy are to be given at intervals of from fifteen minutes up to three hours. As long as it is well borne it may be given to any extent short of intoxication. Children readily take a sort of syrup of brandy made by burning it beneath a lump of sugar, which becomes melted in the process. At moments of sinking he regards carbonate of ammonium as valuable. He gives from two to ten grains by the mouth, in syrup of acacia, or from eight to forty grains by the rectum. At moments of collapse the ammonia is given by intravenous injection.

The sore throat is treated by pellets of ice placed in the mouth and renewed more or less cautiously. The use of ice-compressors is not approved. It is thought better to apply warm cotton batting, spongio-pilin, or an actual cataplasm, or to anoint the neck with oil, lard, or cosmoline, care being taken not to abrade the cuticle lest local infection arise as a complication. Morphia is administered when great pain arises.

Morbid products in the pharynx and nasal passages undergoing detachment should be promptly removed. This morbid product is kept diffuent as much as possible by maintaining an excess of humidity in the atmosphere of the room by keeping a steaming vessel of water on the stove. The uninvaded tissue should never be cauterized. Applications of the tincture of the chloride of iron should be made to the pseudo-membrane with a swab of cotton or sponge. After this application the attempt may be made to remove the deposit by gargle, spray douche, or syringe; employing lime-water as the medium. Forcible removal of the deposit is not regarded as judicious.

When the larynx is invaded Dr. Cohen keeps a constant stream of steam in motion directed over the patient's face. Whenever the respiration becomes obstructed, a few pieces of lime about the size of the fist are slacked by the bedside every hour or so, covering the vessel in which they are slacked with a hood of stiff paper, so as to direct the steam and particles of lime toward the mouth of the patient.

The use of emetics is indicated in children to provoke expectoration from the air-passages in the act of vomiting; but the same indication does not occur in adults who are able to expectorate voluntarily. If successful, the emetic may be repeated, at intervals of six hours, as long as the indications continue to recur. Alum, ipecac, and turpeth mineral are the most reliable agents, and may be tried in the order named; adhering to the alum if it prove efficient. Emesis should not be carried too far, or be repeated if ineffectual, as it exhausts the power of the system without any compensation in the discharge of morbid products.

Should asphyxia be threatened from

accumulations in the larynx or trachea, tracheotomy is indicated, and, though most frequently unsuccessful in averting death, it facilitates due access of atmospheric air to the lungs, and often saves lives that would otherwise be lost. The most careful attention is required after tracheotomy to keep the artificial passage clear. The stimulating treatment and the lime inhalations should not be discontinued. The two main indications for favorable prognosis after tracheotomy are desire for food and ability to expectorate. All treatment should be subservient to facilitating these great ends.

BARTHOLOW believes that there are two objects to be kept in view in the treatment of diphtheria:

1. To modify the course and shorten the duration of the disease;
2. To obviate the tendency to death.

First head.—The application of topical agents to the fauces and the administration of internal remedies according to symptoms.

He entirely disapproves of caustic and acid applications as inviting the disease to the adjacent portions of the mucous membrane by destroying the epithelium. He does not think much of the value of benzoate of sodium. The application of sulphur, in the form of powder, by insufflation or by blowing it over the whole diseased surface as far as it can be reached, he believes to be good treatment. He regards lime-water and lactic acid as of value as solvents. Some pieces of freshly burned lime are put in water, and the patient directed to breathe the vapor as it rises, or a solution of lactic acid strong enough to taste distinctly sour is freely applied to the throat by a large mop. He places no value in the use of chlorate of potassium or tincture of the chloride of iron as faucial remedies. When gangrenous

sloughs are thrown off from the throat, carbolic acid is indicated, a one per cent. solution—not stronger than one per cent. This solution may be applied either by mop or syringe. When the exudation extends into the nares, the spray of a one per cent. solution of carbolic acid is gently thrown into them and kept up until the two canals are pervious, thus preventing the extension and decomposition of morbid materials and the consequent swelling of the deep cervical glands and possible development of septicæmia. It is only when the exudation extends into the nares that much good can be accomplished by topical applications—so thinks Dr. Bartholow.

Second head.—The prevention of the diffusion of the morbid agent, of the development of septicæmia, and of failure of the heart.—With the earliest appearance of an exudation in the fauces, from two to ten grains of the bromide of ammonium are given every three hours. It is believed that the diffusion of this agent through the mucous membrane of the respiratory organs, and so out of the mouth, detaches the exudation. To prevent septic decomposition he advises the use of a drop or two of Lugol's solution in water every hour or two. This drug is to be given when the exudation is fully developed and spreading. He uses alcohol steadily, pushing it in large doses as an antiseptic agent. Quinia is also considered valuable in this same connection. Dr. Bartholow does not believe in the extraordinary powers of chlorate of potassium in this disease, as claimed by many. He fears its injurious effects on the kidneys.

As food, milk, egg-nog, and beef-tea are given freely about every three hours.

ABRAHAM JACOBI sums up the treatment as follows: Every case should be treated on general principles with symp-

tomatics, roborants, stimulants, febrifuges, externally, internally, or hypodermically.

The uncertainty of the termination and the frequency of collapse, or sepsis, prohibit procrastination. Waiting long means often waiting too long. Alcohol is a very important adjuvant and remedy.

The dose must often be apparently large, from two to twelve ounces daily, according to the circumstances.

Depletion is absolutely contra-indicated. Debilitating complications, such as diarrhœa, must be stopped instantly. Stomatitis, chronic pharyngitis, hypertrophy of the tonsils, glandular enlargements, must be relieved or removed preventively. Acute catarrh of the mouth and pharynx requires the use of potassium or sodium chlorate, in doses not exceeding a scruple daily for a child of a year, one to two drachms for an adult. The single doses must be small and very frequent—every hour, half, or quarter hour. Large doses are dangerous, result often in nephritis, and have proved fatal. The main indication in local diphtheria is local disinfection. To disinfect the blood effectively we have no means. Salicylic acid changes into a salicylate which is no longer a disinfectant. The amounts of disinfectants required to destroy bacteria are so great that the living body could not endure them. But the discipline of the house, school, and social intercourse can be so modified as to prevent the spreading of an epidemic. The inhalation of steam is very useful in catarrh of the respiratory organs, and also in inflammatory and diphtheritic affections. In fibrinous tracheo-bronchitis it has proved quite successful. But it may also prove dangerous by excluding oxygen and overheating the room or tent. Drinking large quantities of water, with

or without stimulants, also excites action of the muciparous glands and aids in macerating membranes. The internal use of ice, and its local applications to the affected parts can be very useful. But the cases must be selected for each and any of the remedial agents and applications. The use of baths and the cold and hot pack is controlled by general indications. The usefulness of lime- and water lactic acid has been greatly overestimated. Glycerine is a valuable adjuvant, both internally and externally, but nothing more. Turpentine inhalations are deserving of further trials, though they are more effective in purely inflammatory than in diphtheritic processes. Inhalations of chloride of ammonium act favorably in catarrhal and inflammatory conditions, and deserve a trial for the purpose of aiding maceration of membranes. Mercurials are contra-indicated in the septic and gangrenous forms of diphtheria, but in those which assume the purely inflammatory character, with less constitutional debility and collapse, as in sporadic croup or in fibrinous tracheo-bronchitis, some reliable clinicians claim good results. Astringents, such as alum, do not work favorably. Chloride of iron is among the most reliable of antiseptic and astringent agents. Small doses at long intervals are quite useless. Moderate doses frequently repeated have a satisfactory general and local effect. A child of a year must take at least a drachm daily; a child of three or four years, from two to three drachms. The same or larger doses for an adult. The chloride is to be mixed with water and glycerine in various proportions, so that a dose is taken every hour, every half-hour, every ten minutes. Thus the local applications to the throat become almost superfluous. Potassium or sodium chlorate, half a drachm daily,

may be added with advantage. Carbolic acid is useful both in local and internal administrations. According to the end to be reached, it may be used either in concentrated form or in a one per cent. solution. Internally, in doses of a few grains to half a drachm daily. Salicylic acid acts as a caustic when concentrated; in moderate solutions it destroys fetor; salicylates are anti-febrile only. The anti-febrile effects of quinia are not so favorable in infectious as in inflammatory fevers; its antiseptic action is not satisfactory in practice. Deliquescent caustics are dangerous. Injury of the healthy mucous membrane must be avoided. Mineral acids, and particularly carbolic acid, when their application can be limited to the desired locality, are preferable. Bromide, both internally and externally, is warmly recommended by Wm. H. Thompson. Boric acid, in concentrated and milder solutions, has been recommended as a local application to membranous deposits generally, and to the diphtheritic conjunctiva in particular. Membranes must not be torn off, and not removed unless they are nearly detached. Caustics are contra-indicated, except where their application can be limited to the diseased surface. No healthy part must be torn. Swelled lymph glands require ice, iodine, iodoform, mercury, poultices, incision, carbolic acid; according to circumstances, and at all events frequent and careful disinfection of the mucous membrane from which their irritation originates. Diphtheria of the nose is apt to be fatal unless careful treatment is commenced at once. It consists of persistent disinfection of the nares and pharynx by injections. The tendency to sepsis forbids a long intermission of them. They must be continued day and night, for one to several days, no matter whether

the glandular swelling be considerable or not. Laryngeal diphtheria proves fatal in almost every case, unless tracheotomy be performed. It is less successful the more the epidemic or case bears a septic character. Emetics are useful for the removal of the half-detached membranes. Diphtheritic paralysis requires good and careful feeding—iron, strychnia, the faradic or galvanic current, friction, hot bathing. Urgent cases indicate the hypodermic administration of strychnia. Diphtheritic conjunctivitis is benefited by ice and boracic acid; cutaneous diphtheria by local cauterization and disinfection, besides general treatment.

C. E. BILLINGTON recommends the following prescriptions: *No. 1.—Iron and Glycerine Mixture.* \mathcal{R} . Tinct. ferri chloridi, f 3 j.; glycerinæ, aquæ, $\mathfrak{a}\mathfrak{a}$ f 3 j. M. Sig. A teaspoonful of this and of No. 2, alternately, every half-hour through the day. *No. 2.—Chlorate of Potassium Mixture.* \mathcal{R} . Potassi chlorate, 3 ss.; glycerinæ, f 3 ss.; aquæ calcis f 3 ijss. M. Sig. A teaspoonful of this and of No. 1, alternately, every half-hour through the day. *No. 3.—Spray Mixture.* \mathcal{R} . Acid. carbol. mxv.; aquæ calcis, f 3 vj. M. Sig. To be used with a small hand atomizer. The patient is allowed to sleep for an hour or two at a time at night. When awake, doses of Nos. 1 and 2 are alternated every half-hour. The throat is sprayed with No. 3 for several minutes at a time, whenever Nos. 1 and 2 are given. In spraying, the mouth is opened widely.

Where there is nasal implications the nose is thoroughly syringed out with warm or tepid salt-water, once, twice, or three times a day. This syringing is done with the patient's head inclined forward; a two-ounce hard-rubber ear syringe is used.

Dr. Billington never applies any

brush or swab to the throat. He sometimes throws a drachm of No. 1, with a syringe, directly against the affected surface in the throat. He does not give quinia or any other unpleasant medicine to children. He does not give alcoholic stimulants except where a child, who cannot be induced to take other nourishment, will take weak milk-punch or egg-nog.

The patient is nourished with an abundance of cold milk, given frequently, to which a little lime-water is often advantageously added. When the stage of extreme exhaustion has been reached in bad cases the juice squeezed from beefsteak is given.

DISEASES OF THE NERVOUS SYSTEM.

Tonic Spasm of the Trapezius Muscle of Malarial (?) Origin.

DR. L. EMMETT HOLT (*N. Y. Med. Jour.*)

Joseph R., eleven years of age, presented himself at my dispensary clinic on Monday, September 24, 1883. He stated that he had been as well as usual on the Saturday previous; went to bed all right, but awoke in the middle of the night and found his neck drawn to the right side, and so stiff that he could not move the head in any direction. There was no history of exposure, and no draught in the sleeping room, the windows being all closed. He felt no pain whatever. The spasm had continued from that time until I saw him. The only change he had noticed was that he thought it was less marked on Sunday and Monday mornings than in the afternoons, as he had been able at those times to move the head slightly. The only pain he had experienced at any time was when attempts at movement of

the head were made. The bowels were constipated. He thought no febrile movement had been present. On examination, quite a unique deformity was found. The right shoulder was elevated fully three inches higher than the left, and the head was drawn downward so as nearly to meet it, deviating fully 45° from the vertical. His clothing was removed with a good deal of difficulty. The anterior border of the trapezius stood out very prominently at the side of the neck, and its fibres were very tense and hard. The middle fibres were also rigid, while the lower ones did not seem to be at all affected. The right scapula was nearer to the spine than the left, and its inferior angle was more prominent. The spine presented a well-marked double curve to the left in the cervical region and to the right in the dorsal. The dorsal curve was the greater, and looked precisely like an old lateral curvature. Viewed in front, the head was seen to be slightly rotated to the left and the chin a little elevated. Neither of the sterno-mastoid muscles was prominent or rigid. The head was held absolutely fixed in this position; voluntary attempts to straighten it brought out the sterno-mastoid muscles prominently, but made no visible change in the deformity. Passive movements were alike without effect, and produced pain. There was no tenderness found along the spine, over the trapezius muscle, or anywhere about the shoulder.

The patient's general condition was quite good. He was fairly nourished, and perhaps a little anæmic. The tongue was coated; buccal temperature 100.5° F.; spleen very much enlarged.

The acuteness of the invasion seemed to preclude the possibility of any bone disease. The absence of any history of exposure, and of all muscular tenderness and pain, was thought sufficient to

exclude any rheumatic element from the case. The constipation, the splenic enlargement, the slight fever, suggested the possibility that malarial poisoning might be the cause, especially as he lived in a district well known to be malarial. At all events, this view was adopted as a working hypothesis, and a



FIG. 1.

mercurial cathartic and cinchonidine were ordered.

I took him at once to a photographer, but failed to get a picture, as the day was a stormy one. I directed him then to take no cinchonidine until he had been photographed the following morning. He promised faithfully; but, fail-

ing, doubtless, to see the force of the injunction, took ten grains of cinchonidine that night, and twenty more the following morning, before the accompanying photographs were taken. Whether from the effect of the medicine or not, very marked improvement had in the mean time taken place. The deformity of the

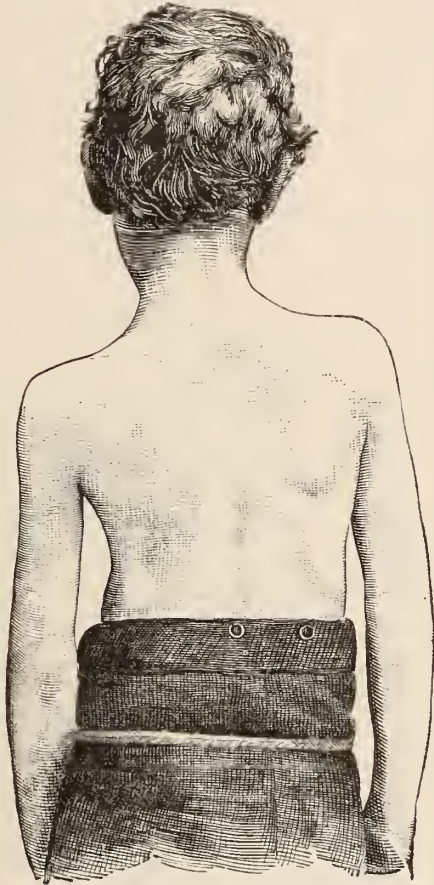


FIG. 2.

previous day is only feebly portrayed. It was the same in kind as that shown in the cuts, but much exaggerated in all particulars. Another circumstance which militated against us was the fact that the artist thought we wanted the photographs to show the result of treatment, and apologized for the pic-

ture, saying that he tried his best to make the boy stand straight, but that he would keep the right shoulder raised in spite of him, after he had gone to him several times and pushed it down forcibly. I mention this fact as the prominence of the left sterno-mastoid, which is shown in the cut, was not present when I saw the case, and is evidently caused by the attempt to hold the head erect.

I examined the boy that same afternoon and found that the rigidity had, in a great measure, disappeared. It required close inspection to detect any deformity. He took no more medicine; his symptoms did not return. I examined him critically four days later. No trace of the deformity existed. The spine was straight, and its movements, as those of the neck, were perfect.

I called at the house a month later and learned there had been no relapse.

Chloroform Pomade.

Union Med. says: The following is the formula of LASEGUE and REGNAULD's pomade: Chloroform, 20 to 30 parts, and vaseline, 60 to 80 parts. It is employed for rheumatic and neuralgic pains, and in the vague thoracic pains of tuberculous patients.—*Med. and Surg. Reporter.*

A New Treatment for Neuralgia.

The latest agent introduced for the relief of neuralgia is a 1 per cent. solution of hyperosmic acid, administered by subcutaneous injection. It has been employed in BILLROTH'S clinic in a few cases. One of the cases had been a martyr to sciatica for years, and had tried innumerable remedies, including the application of electricity no fewer than 200 times, while for a whole year he had adopted vegetarianism. Bill-

roth injected the above remedy between the tuber ischii and trochanter, and within a day or two the pain was greatly relieved, and eventually quite disappeared. It would be rash to conclude too much from these results, in the face of the intractability of neuralgia to medication, but if it really prove to be efficacious as considered, hyperosmic acid will be a therapeutic agent of no mean value.—*Lancet*.—*Md. Med. Journal*.

Local Anæsthetic Action of Chloroform.

Dr. HEUSNER writes, in the *Deutsche Medicinische Wochenschrift*, concerning a little procedure adopted by him to facilitate the local application of chloroform for the relief of superficial pains. Although chloroform will be absorbed in greater or less degree in whatever way it is applied to the skin, yet its irritant action is much less marked and its anæsthetic effect equally as great if it can be applied only in the form of vapor. To obtain this mode of application easily and without any waste of the drug, the author had made some shallow cups of tin, curved in such a way that they might be applied closely to the skin of the face, trunk, or extremities. To render them air-tight when on the skin, the rims of the cups were provided with rubber edges. To the outside was attached an elastic band, to retain the cups in whatever position might be desired, and inside was fastened a pledget of lint. When used, a few drops of chloroform are poured on the lint and the cup then inverted over the painful part. A sensation of tingling and warmth is first felt, which soon passes on to pretty severe burning, while the original pain becomes more faint. A moderate pain may be entirely cured, and even very severe pain is rendered quite tolerable.

Dr. Heusner has used this mode of application successfully in pleurodynia, dry pleurisy, gastralgia, earache and headache. It is of little use, however, in deep-seated pain, and often the worse forms of neuralgia are uninfluenced. Instead of the specially made cups a simple wine-glass will answer the purpose. The applications should not be too long continued for fear of causing vesication.—*Med. Record*.

[We have frequently used chloroform in a manner similar to the above, using instead of the cups of tin, etc., an ordinary watch crystal. We have found this expedient especially useful in trigeminal neuralgia.—ED.]

The Treatment of Epilepsy.

We have successfully employed for more than fifteen years in a large number of cases of epilepsy the following course of treatment, and we are convinced from the numerous cases in which we have employed it that it possesses as much or more value in controlling, and in many cases entirely relieving this terrible disease than any other. We always prescribe a good active cathartic, combined with some anthelmintic, and prescribe each day sufficient laxatives to keep the bowels soluble and give the following: *R.* Ammonia bromide, 2 $\bar{\text{ss}}$; elixir valerianate of ammonia, 2 $\bar{\text{ss}}$; fl. ext. stramonium, 1 $\bar{\text{ss}}$; glycerine, 2 $\bar{\text{ss}}$; syrup anranti. cort., 4 $\bar{\text{ss}}$; aqua dest., 6 $\bar{\text{ss}}$. *M. Sig.* Tablespoonful before meals.

We also prescribe at bedtime from 30 to 60 gr. of potassium bromide. This treatment I have found to be successful. We have had some cases where other remedies had failed when the prescription as above recommended has succeeded in at least controlling the dis-

ease. But do not think that every case will be benefited by this treatment, as we know that there are many cases which are incurable and no treatment will relieve. We have always been opposed to the physician who had a specific for every ailment, as we think the true method is always to prescribe according to the indications. We must study our cases well and watch every symptom and prescribe according to the indications.—*Ed. Ft. Wayne Med. Jour.*

Bromethyl

(C_2H_5Br), according to Prof. BERGER, of Breslau (*Deutsche Med. Zeit.*), has proven palliative in various neuralgiform conditions of the nerves about the head and face, even after the usual remedies (quinine, soda salicyl, caffen, guarana) had failed. In the typical cases of megrim, neurasthenia, hysteropilepsy and of psychical exaltations, it has also proven beneficial. It is inhaled several times a day in doses of twenty to forty drops, and can be increased until narcosis sets in. Nitro-glycerine has given relief in various forms of headache. It is very poisonous, and should, therefore, be given with care in a 1 per cent. alcoholic solution, one drop to three, three times daily.—*Weekly Med. Review.*

DISEASES OF THE URINARY ORGANS.

The Liability of Error in Examining for Sugar in the Urine.

The following illustrates with what care and precaution every urinary examination in regard to the presence or absence of sugar ought to be made. Professor v. Heusinger in a late session of the Aertzl. Verein, in Marburg, declared that a certain individual desired

to be examined in view of having his life insured. At the close of the physical examination he was requested to urinate. As he had micturated before entering the doctor's office he now could pass but a slight amount. The chemical examination gave a yellow-green precipitate (saccharine). At the examiner's request the man returned the next morning, and the urinary test presented a negative result. It turned out after a close questioning that the individual had suffered for months with gonorrhœa, and had used injections of sulphate of zinc. He had passed water and used this injection just previous to presenting himself for the first examination. Dr. Fettien, who was then consulted, found that if a solution of sulphate of copper is added to one of sulphate of zinc and tartaric acid and caustic soda in excess, a blue fluid is formed which contains, besides the constituents of Fehling's solution, sulphate of zinc. Added to boiling urine, the zinc is precipitated as a hydrate with a grayish green color and the solution turns from blue to yellow. If albumen is added the same phenomena are observed, only the fluid above the precipitated zinc is reddish.—*Berl. Klin. Wochenschrift.*

A New Urinary Test.

A solution of sulphodiabenzole under certain conditions gives a characteristic reaction with the urine in several pathological conditions. According to Ehrlich, the solution is prepared by acidifying 500 C.c. of water with 30-50 C.c. of pure sulphuric acid, and then adding sulph-anilinic acid until an excess remains undissolved, and then a few grains of nitrate of soda in solution in water. In summer this solution may be kept for two or three days, while in winter it remains unaltered for five. If

equal amounts of this reagent and urine from a case of typhoid fever are mixed, and then a little ammonia added, an intense scarlet red is developed. Normal urine does not produce this result. With the exception of pulmonary phthisis this reaction is nearly always associated with the febrile state, while its appearance is especially constant in typhoid fever. Penzoldt has also experimented with this reagent, and has obtained the characteristic reaction in diabetic urine, even when the urine contains only one part per thousand of sugar.—*Centralb. f. d. Wissen.—Med. Times.*

Iodoform in Chronic Cystitis.

Dr. DAVID PRINCE, (of Jacksonville, Illinois,) has met with success (*St. Louis Medical and Surgical Journal*), in several cases of chronic cystitis by the use of iodoform. A soft catheter is introduced into the bladder, which is by this means thoroughly emptied, if there is any residual urine which the patient is unable to void voluntarily. Then fifteen cubic centimetres of the following preparation are to be injected: Five grammes of iodoform are ground with twenty-five grammes of starch, and the whole is "moistened" with forty cubic centimetres of water. The mixture is to be injected daily and allowed to remain. The medicament is not entirely expelled at the first subsequent passage of urine, as the heavy crystals of iodoform adhere to the mucous membrane. Starch was the substance chosen to incorporate with the iodoform because it was free from irritant properties. This treatment speedily allays the irritation of the vesical mucous membrane, and with it the painful reflex contraction of the muscular coat of the bladder. The relief of this reflex contraction greatly increases the available capacity of the bladder. "In the case

of a gentleman who had suffered greatly for several years, there was no pain after the first introduction of the iodoform. He thought after a four days' treatment that the capacity of his bladder had been doubled." Dr. Prince believes that the same treatment will be found beneficial in gonorrhœa. He thinks it will prove better than the use of pencils or bougies of iodoform and gelatin, because the iodoform, as he employs it, adheres to the urethral mucous membrane, and its action is therefore kept up for some time after the injection has been allowed to escape. The action of iodoform when used in pencils or bougies can last only while they are retained. Dr. Prince also suggests that the treatment of moderate strictures of the urethra, accompanied by vesical inflammation, may be advantageously preceded by the use of iodoform and starch. Mechanical dilatation, electrolysis, or other measures, will, of course, be required afterward.

DISEASES OF RESPIRATORY ORGANS.

Medicated Tracheal Injections.

At the recent session of the Association Francaise pour l'Avancement des Sciences, held in Rouen, Dr. Bergeron presented a memoir on the subject of the injection of medicated substances into the trachea (*Lyon Médical*, October 7, 1883). The injection of medicated liquids into the respiratory passages below the larynx is, he asserted, very well borne by cows, horses, and dogs, and determines very slight functional trouble. It is possible to inject in this way, in man, a solution of citrate of morphia, if the needle be protected during its introduction, by a trochar, so that the canular shall not become plugged up in traversing the tissues. The

little operation should be practiced while the patient is lying down, so as to avoid syncope. M. Bergeron has, under these precautions, made twenty-five injections in thirty-five days, with calming effect, in a patient suffering from pulmonary phthisis.—*Ibid.*

Nasal Disease a Cause of Asthma.

Dr. J. O. ROE, in a paper printed in the Journal American Medical Association on Nasal Disease as a Cause of Asthma, says: There are two modes in which nasal disease provokes attacks of asthma. 1. The most frequent form results from narrowing or occlusion of the nasal passages by hypertrophied tissue or nasal polypi. 2. That induced by disease of the pituitary mucous membrane unassociated with hypertrophy or polypi. The first is both mechanical and nerve reflex in its character, while the second is purely reflex. It is a noticeable fact, that nasal polypi and hypertrophied tissue, when inducing asthma, are almost invariably located on the posterior end of the turbinated bone. This sensitive area of the turbinated tissue at the posterior end of the turbinated bone, Dr. J. N. Mackenzie, of Baltimore, likened to the sensitive cough centers found in the pharynx and larynx. The more frequent occurrence of asthmatic attacks at night, especially in those persons having hypertrophic catarrh, is by this fact very clearly explained. At the posterior end of the turbinated bone, the cavernous erectile tissue is much thicker and more dilatable than at the anterior, consequently, when in the recumbent position, the gravitation of the fluids distends this portion of the tissue, which, together with the accumulation of the secretions, occlude the passage, produce pressure at this sensitive point,

and reflex irritation in the lungs results. This irritation is reflected to the lungs through the cervical sympathetic connecting the pneumogastric nerves with the trigeminus, which has extensive distributions in the nose. The mechanical effect of occlusion of the nares cannot be better illustrated than by the marked dyspnœa, which is occasioned in young children if by any cause the nostrils become obstructed.

DIGESTIVE TRACT.

Changes in the Inferior Vena Cava occurring with Cirrhosis of the Liver.

The study of œdema of the subcutaneous connective tissue in cirrhosis, and the thereby induced belief that this œdema could not be explained wholly by the mechanical conditions existing in the liver, led Dr. DE GIOVANNI to examine particularly the condition of the vena cava in this affection. These investigations disclosed the fact that the œdema in question was owing chiefly to disease and consequent disturbance in function of the vena cava ascendens. He found peri- and endo-phlebitis, thickening of the adventitia, hypertrophy of the entire wall of the vessel, and increase in size of its lumen. In one case of cirrhosis of the liver in which, notwithstanding there was meteorism and marked ascites, no œdema was present, he predicated the absence of disease of the vena cava, and the correctness of his assertion was confirmed at the autopsy.—*Centralblatt für Klinische Medicin.*

Acute Intussusception Successfully Treated by Injection of Air and Inversion.

M. E. BIGGS, of London, reports the following interesting case (*Br. Med. J.*): A little girl, between three and

four years old, had been ill for about forty-eight hours with vomiting and diarrhœa. On visiting the patient she was found both very pale and prostrated. The symptoms had come on suddenly, and consisted of constant vomiting, so that no nourishment could be kept on the stomach.

She had tenesmus, accompanied by bloody discharge of mucus, and no stool had been passed since the commencement of the illness. Examination of the abdomen revealed no tumour; but, on introducing the finger into the rectum, the usual sausage-shaped tumour was most distinctly felt. Having nothing at hand but a Higginson's syringe, I attempted to inflate the bowel with this, but did not meet with much success, as the air kept escaping.

I therefore suddenly raised the child by the heels and kept her inverted for a moment. Examination, per rectum, immediately afterwards, could detect nothing abnormal, the previous tumour having disappeared.

The next day, on calling, the mother informed me that the child had been quite well since I left; had eaten and retained the food; and that all the symptoms had been in abeyance ever since what she called the "operation." The child is now quite well, some months after the illness recorded above.

The diagnosis, says the reporter, admits of no doubt.

The Less Obvious: Symptoms of Gastric Ulcer.

The frequency with which ulcer of the stomach occurs, though indicated by dissections of the dead, and taught, moreover, by several writers, is perhaps not duly realized; and it is probable that from time to time the absence or the want of salience of some of the well known symptoms in this affection

leads to imperfect observation of the case, and in consequence to erroneous diagnosis and ineffectual treatment. In the mass of instances, both in hospital and private practice, usually relegated to the large category of dyspepsia there are many where careful observation and inquiry into past symptoms suggest the probably causative influence of gastric ulcer. Apart from the significant occurrence of rapidly fatal perforation, sometimes without any premonitory complaint whatever, which should have its important clinical lesson for all, and the frequent discovery of healed ulcers in the post-mortem room, careful observation of symptoms and a little scientific use of the imagination seem to lend great force to the teaching which emphasizes the part played in so-called dyspepsia by this curious affection of the stomach.

It would not appear necessary in these cases that the complaint of *severe* pain should be made; though much stress should be laid on its more or less definite localization, and time of occurrence in relation to taking food. It would be surprising to those who may not have paid much attention to this subject to learn that in an extremely large number of the very common complaints of pain between the shoulders at a certain definite spot, or, more rarely, of a similar pain at the epigastrium, which are of constant occurrence in the out-patient room, very definite and indubitable histories of considerable vomiting of blood can be obtained, though often this symptom has either been so remote in time, or, if repeated, so slight in degree that the patients do not spontaneously complain of or report it. These cases are probably too frequently put down to "gastritis" or "gastric catarrh," and, even more vaguely, when the pain and general disturbance are

but slight, to that refuge of diagnostic doubt, "dyspepsia," or are looked upon as solely and directly due to improper feeding.

It must be remembered that the kind of complaint under consideration—the definite *interscapular* pain, the "sinking," etc.—although familiar to those whose work is among the lower orders, is but rarely made by the more well-to-do, whose many and variegated dyspeptic maladies are directly traceable to what and how they eat and drink. Such cases of indigestion, on the other hand, and such troublesome cases—from the point of view of treatment—as are so often met with among the higher classes, occur but rarely among the lower, where in the few instances taking place outside the circle of tea- and alcohol dyspepsia, and often in these as well a cure can generally soon be wrought. But it is by the lower classes, and by women especially, that the definite complaint of interscapular or epigastric pain is so often made; and among them, too, is admittedly found the greatest incidence of gastric ulcer, as evidenced by unquestionably marked symptoms during life or by examination after death. It may be interesting perhaps, to remember in this context that the greater frequency of pain between the shoulders than "at the pit of the stomach," may have some connection with the more favorite seat of gastric ulcer on the posterior aspect of the organ,* and that the locality of the cause of the pain may be hinted at by the frequently beneficial effect of a sinapism placed *in situ*.

These remarks may be applied as well to cases where no history of hematemesis can be obtained, or even where it can be excluded. Many instances of gastric ulcer undoubtedly occur without hemorrhage, as especially shown by the rapidly perforating ulcers in the ante-

rior wall of the stomach, unchecked in their fatal course by any adhesions to other organs. One practical and additional aid in the diagnosis of the obscurer cases of this affection is the condition of the tongue, which is but rarely coated or furred as it would be were the gastric affection, if accompanied by equal pain, either diffuse inflammation or malignant growth. The reasonable hypothesis of the great clinical frequency of gastric ulcer will often lead to success in treatment after many dietetic changes and many drugs have failed; for it points to as near an approach to *perfect rest* of the stomach as possible—to semi-starvation sometimes for awhile, or even rectal feeding, in cases before any alarm of danger arises. Such treatment will occasionally work apparent wonders, and may serve also to support the diagnosis in the mind of the doubter, when he finds that on a speedy return to ordinary food the patient's pain may often be long in recurring, or may never be heard of again.—*Med. Times and Gazette*.

DISEASES OF CIRCULATORY ORGANS.

Angina Pectoris as a Symptom.

In a recent clinical lecture, Dr. LANDOUZY (*Le Progrès Méd.*, 1883, Nos. 35 and 36) reminded his hearers that angina pectoris should not be regarded as a morbid entity. Like epilepsy, it is not an autonomous disease, and, like it, there is no such thing as angina pectoris as a unity. No doubt there is a dramatic completeness about an attack of this affection: retrosternal pain, anxiety, painful immobility, pallor, cold sweat, painful irradiations down the cervical and brachial nerves. This completeness attracts the attention of the patient and physician, so that it has come

to be regarded as always presenting the same characters and bearing the same grave prognosis. But this involves an error, not only doctrinal, but of great practical importance. Just as there are epilepsies which depend on this or that condition, more or less transient or amenable to treatment, so there are anginas which may be due to transient or curable conditions. This form of purely nervous angina is well attested, but deserves to be better known. These patients have more to complain of than to fear; the angina is one of the numerous phases of their neurosis, which may depart after a time never to return, is never dangerous to life, and depends on a mere functional derangement of the nervous system. In another type, the occasioning causes are obscure, irregular in their effects, and instead of the kind just related are usually a little fatigue, an emotion, or some slight digestive trouble. No doubt, there is some pathological element which determines the occurrence within one minute of an attack which was absent a minute before. But this is often hard to define, as such attacks may come on when the patient is in perfect repose, sometimes in bed, and often during the first sleep. It may sometimes happen that a patient with some slight cardiac lesion, who is also nervous, may have angina, which should be ascribed rather to the neurotic temperament than to the cardiac lesion. Thus Mme. K— had a slight aortic obstruction; but after the menopause she became decidedly nervous, with sudden attacks of flatulence, outbursts of laughter and tears, œsophageal spasm, neuralgia, transitory paraplegia, palpitations, asthma, loss of memory, difficulty of articulation, slight convulsive seizures, etc. Upon these supervened an attack of angina, which, in virtue of her cardiac lesion, was

alarming. The aortic lesion under treatment appeared to improve; but the neurasthenia increased, diabetes supervened, and then new attacks of angina appeared, and these were regarded as rather the results of the neuropathy than of the cardiac condition; and she was told that they were no more dangerous than the asthma, palpitation, neuralgia, etc., which had so long troubled her.—*N. Y. Med. Jour.*

A Note on the Treatment of Cardiac Dropsy

Dr. JAMES BRAITHWAITE says (*Lancet*): Although the diuretic action of digitalis in cardiac disease with dropsy is perfectly well known, it is very rarely indeed prescribed in that form in which its diuretic action is most marked. He relates the following case: A man with extreme anasarca from cardiac disease, but without as yet the appearance of the skin or the legs indicative of threatened dermatitis with sloughing, passed several days and nights sitting on the edge of the bed, suffering from extreme dyspnœa. The patient was ordered to drink freely of freshly prepared but weak infusion of digitalis. This caused a very copious secretion of urine, which continued until the dropsy had entirely disappeared, and the man actually resumed his occupation of traveling for orders in some business. From this time on Dr. Braithwaite has invariably used this treatment. He generally orders half a small or medium-sized leaf to be infused, with the addition of a little black tea, in about twelve ounces of boiling water, and taken daily. By this means, he claims, we get the full diuretic effect of the drug, in addition to its action on the muscle of the heart. He says, "The action of the ordinary tincture and of the powder given in pill is, as a diuretic, hardly noticeable, and the usual combination with squills, solution of acetate of ammonia, and spirit of nitric ether is much inferior to the infusion."—*Med. Med. Jour.*

CONSTITUTIONAL DISEASES.

Enteric Fevers.

Calomel—Iodine—Carbolic Acid.

Dr. NELSON, in the *Planet*, thus editorially treats of this subject, in substance:

Calomel. In cases complicated by intestinal inflammation, softening and ulceration of the mucous membrane of the intestines, calomel may possibly sometimes be of service; though how far this intestinal inflammation is sthenic, or how far atonic, should be carefully examined into. This knowledge is exceedingly difficult during the life of the patient; but it may be approximately attained by referring to the records of a large number of autopsies.

Apart from that supposed beneficial influence, we all know (and do not need to be told) that all preparations of mercury, calomel especially, are very weakening; many persons feel weakened after one dose, let alone the increased work it almost invariably throws upon the intestines, as regards peristaltic action and hypersecretion. This primitive weakening may in a certain number of cases never be recovered from. Formerly, depletion was the rule in almost every disease, including fevers; latterly, especially in fevers, we have come to consider, and have been taught, that these different abnormal conditions entitled diseases and fevers, were not the outward and visible expression of overaction, but rather indicated a lessened and imperfect vital co-ordination in the several parts of the body; a condition of algebraic minus instead of plus; that consequently, as regards extraneous aid, or therapeutics, the indication scientifically would be to put in strength, instead of taking away. It is true that in this calomel treatment of fever, the

calomel is administered in a very hazardous way; as if the physician were playing with it.

Take next the iodine—carbolic acid. It will be observed in Dr. Wilson's formula, the dose is very small, although frequently repeated. Iodine compounds are excessively weakening, although the ultimate effect, in struma for instance, may be beneficial, therefore termed "tonic."

The carbolic acid is evidently added, on account of its antiseptic properties.

Iodine salivates, like mercury; so care has to be taken. We think that the doses of the iodine and carbolic acid are too small to have any effect on enteric or any of the other fevers. Although the statistics seem to be favorable, we do not really think this revived treatment any step in advance.

In our library, we turn to the celebrated dictionary of Nysten, re-written by Littre and Charles Robin (in French); in the articles on fevers no mention is made of mercury in the therapeutics. Consulting next the English work of Mason Good, in four volumes, which, with its many imperfections, is still a valuable work of reference, we find on p. 628, vol. i., a short paragraph only, devoted to the subject of the internal administration of mercury; we copy it out entire, as forming an admirable commentary on Dr. Wilson's "calomel treatment." Mercury, as we learn from Sir James Johnson, was tried extensively some years ago at the Bocca Tigris, in the East, on the crews of two ships of war, the *Grampus* and *Caroline*, in consequence of the stock of bark (cinchona) being exhausted. The paroxysms, he tells us, were inevitably put a stop to as soon as the system was saturated; but he adds that three-fourths of the patients thus treated, relapsed as soon as the effects

of the mercury had worn off; and this after three, and in a few cases four, successive administrations, so as to excite pytalism."

This paragraph is short, and if not sweet, is decidedly pithy. And this is all there is of mercury in Mason Good (1840), in our library.

Doubtless in our library of ancient works, dating back to the 14th century, paragraphs might be found relating to the administration of mercury in fever; but we have not time to delve.

Talking of ancient works, we were once (in going over our books) looking through a copy of Fabricius ab Aquapendente (in Latin, of course), and came across the use of vinegar in cancer; just before this, Dr. Broadbent, of London, came out with a great flourish of trumpets on the same thing, as original. We immediately wrote over to the London *Lancet*, stating what we had read in Fabricius; but we presume no notice was taken of the communication.

Etiology of Fever.—Broussais taught that every disease, including fevers, was due to "inflammation." As Mason Good states, p. 606, "the fact itself of such regularity of recurrence and interval (Good is speaking of agues) is an insurmountable obstacle to Broussais' doctrine. The more modern English observer, Watson, in his celebrated work, thinks that fever is caused by a disturbance of correlation proceeding from the nervous centres. The recent ideas (e. g., Dr. Carpenter, in London) seat the causation of fever in the importation of germs, "ordinary" (with thin mycelium—easily broken through, thus liberating the enclosed germs—to be then developed, under favoring conditions, into bacilli); and "resting spores," i. e. germs with thicker, more resistant envelope; thereby enabling

this second class of germ to remain for years in the ground, and then to be taken up into the human system, and propagated under favorable conditions. When persons recover, or are to die from fever, the germs are discharged by stool, to be again reintroduced into other hosts (habitat) at a favorable opportunity. Such are the facts, as they are reported to have been observed. On this theory, M. Declat has founded his practice of administering phenic acid hypodermically, so as the more effectually to affect the system.

Morphia.—Mason Good speaks in favor of Dover's powder; years ago it was thought inadvisable to give opiates in fever; Dr. R. Nelson favored its exhibition in case of great cerebral excitement, with continued insomnia. Recently there has been a revulsion, in favor of morphia. There can be little question that daily hypodermic administration of morphia (one or two injections a day) is excessively pernicious. It of course allays restlessness, eases the patient, and causes the medical attendant to indulge in delusive hopes; the danger evidently consists in the fact that morphia (especially when introduced hypodermically) is excessively depressing and debilitating—unless its recipient be in full health and strength, and is habituated to its exhibition. A fever patient is already as weak as he can well be, without the morphia, or any other medium of a depressing nature. If a fever case be carefully and scientifically treated, the patient may still have enough vitality left to keep him out of the grave; but we imagine that the exhibition of morphine is only another name for driving the last nail in the patient's coffin. In the same way, quinine and opium given too early in the course of the fever, only excite a still greater degree of febrile action;

and may do almost as much harm the other way.

The Tendon Reflexes in Typhoid Fever.

An exaggeration of the tendon reflexes in patients ill with typhoid fever has been noted by Strümpell and Ballet. Dr. PLUYAND, in a recent brochure on this subject, cites a number of cases in which he found an exaggerated excitomotor power present in the spinal cord. As a rule, the disorder was manifested in the tendon reflexes. But in some this condition was slight or was masked by some other phenomenon (epileptoid movements or contractures). In still others the excitability of the cord found expression in a chorea appearing with the typhoid fever and ceasing with it. There are cases, however, in which the tendon reflexes seem to be diminished. M. Petit-Clerc, in a thesis published in 1880, even regarded this as the ordinary condition in typhoid. Notwithstanding these divergencies, more apparent than real, as they are due often to the methods employed in the study of the reflexes, M. Pluyand thinks it undeniable that there is a condition of increased excitability in the cord in the greater number of cases of typhoid fever. Of 100 cases, the tendon reflex was exaggerated in 58, moderate in 25, and diminished in 17 cases.—*Le Progrès Médical*.—*Med. Record*.

Gelsemium in Intermittent Fever.

In the *St. Louis Courier of Medicine*, Dr. N. B. MCKAY highly recommends it, and uses it with as much confidence as he ever used any of the preparations of bark.

I usually prepare the medicine for use by putting, say, ten drops into a teacup or tumbler, if for immediate use, and measuring in three or four teaspoonfuls

of water to each drop, and giving in teaspoonful doses as stated above. If to be kept for a few days, I put in camphor or peppermint water, which helps to keep it sweet; or, where there is much headache, I put in bromide of potassium, and that helps to keep it. Where parties live at a distance, I add glycerine in place of one-fifth or one-fourth of the water, and then it will keep indefinitely.

This medicine, prepared in this way, will rarely fail to quiet any nervous chill or rigor after it is fairly under way. In such cases I give it sometimes as often as every five minutes in severe cases, and it has never failed me. I have never had occasion to use it in puerperal convulsions, but should not hesitate to use it as last mentioned, and should be confident of the best results. Some will spurn this remedy thus used, on account of its extreme simplicity and size of dose; others, because of its cheapness and other reasons. A few will try it, and not being careful about the amount, giving too much, will be disgusted and discard it; while others will try it faithfully and carefully, and the more they use it the more they will prize it. It is cheap, easy to take, and very effectual.—*Med. and Surg. Reporter*.

A New Method of Treating Chronic Rheumatism by Electricity.

Prof. SEELIGMULLER claims to have met with remarkable success in the treatment of chronic articular rheumatism by electricity. He uses a metallic brush electrode with stiff wires, which he connects with the negative pole, the positive pole being attached to a flat sponge electrode. The latter is dampened and placed on the limb near the offending articulation, then the metallic brush is applied over different parts

of the joint, being held in contact with the integument in each place for the space of from one to ten seconds. The application is very painful, but the professor remarks that the patients soon grow used to it. After a sitting the skin is covered all over with little dots, looking as if the Baunscheid instrument had been employed. The mode of action, the author does not explain, but thinks it cannot be entirely owing to the counter-irritation, for he has used other equally severe cutaneous irritants without meeting with anything near the success obtained by this method. One patient, who had been treated for eight years for chronic rheumatism by all sorts of methods, was able, after the first application of electricity, to raise his arm, which had been powerless for six months; after the third application all the movements were normal. Another man was unable to move either his wrist or his shoulder, owing to rheumatism, and after five sittings was discharged as cured, and was able to resume his work as a stonemason.—*Deutsche Medicinische Wochenschrift*.

The Seasons of the Year and the Prevalence of Acute Rheumatism.

Dr. HENRY S. GABBETT thus concludes a paper on this subject in the *Lancet*:—

1. The disease is neither most prevalent in the coldest months of the year, nor least prevalent in the warmest.
2. It does not occur with greatest frequency in those months in which the daily variations of temperature are greatest.
3. Although there is a certain correspondence between the rainy periods and the times when rheumatism is common, this is not close enough to point to any necessary connection. But cases of the disease are very numerous at that period of the year during which there is usually

a co-existence of low temperature and heavy rainfall, viz., the end of autumn.

4. Acute rheumatism has an annual period of prevalence extending over the eight months from June to January inclusive; as a rule, it is not common in February, March, April, and May.
5. The rheumatic period seems to divide itself naturally into three parts: a summer part from June to August, containing comparatively few cases; an autumn part from September to November, containing a large number; and two winter months, December and January, in which the number sinks again.
6. Acute rheumatism is most prevalent in the months of October and November.

Med. & Surg. Reporter.

Tracheotomy for Diphtheretic Croup.

Dr. E. T. RULISON in *Med. Annals*, after detailing the history of four cases of this malady, some treated with the tracheal tube and others without, thus summarizes giving more evidence in favor of omitting the use of the tube in these cases. In my first and second cases I used the tube, had no intelligent idea of how I wanted to manage the treatment, and consequently had poor nursing, a variable temperature, a foreign body in the trachea, causing unlimited inflammation, etc., etc. In my third case I discarded the use of the tube. Never having seen nor heard how its use could be dispensed with, I passed a single ligature through the trachea on either side, leaving them of sufficient length to tie back of the neck; had the temperature of the room raised to 95° and kept there until breathing through the natural channel was fully established; secured good ventilation by having muslin tacked over the openings made by raising and lowering the windows; saw that sufficient food, tonics

and stimulants were administered; obtained moisture by the *constant* use of the steam atomizer, medicated with muriate ammonia and phenol, and had faithful and intelligent nurses to carry out the treatment ordered.

Immediately after this case I wrote to Dr. John Wyeth, of New York Polyclinic, concerning the mode of procedure in operating without the tube. His answer I made use of in my fourth case, which is to cut through three rings of the trachea and suture the skin to the trachea passing through the rings. The upper and lower ones are cut short, but the middle ones are left of sufficient length to tie back of the neck. This leaves a small wound, and makes it very easy indeed to remove all the secretions, the membrane in particular. I removed the short sutures at the end of twenty-four hours and the long ones twenty-four hours later. There is no particular time for removing them, the condition of the parts being the only guide. The operation itself is easily enough done, if one only has two good assistants with retractors to hold the tissues equally on each side as fast as one divides them. *The tube should never be used.* Cellulitis or broncho-pneumonia, or both, are sure to attend its use. The real work begins after the operation, and requires the utmost vigilance on the part of the attending surgeon and the untiring faithfulness of the nurse. With all due modesty, tinged with regret, I would say that most I have learned in treating tracheotomy cases necessity has compelled me to get by hard experience.

Endermic Use of the Oleate Quinine.

In the July *Journal* we recorded some notes on the endermic use of the oleate of quinine, which left some

doubts as to its absorption. In a discussion before the Medico-Chirurgical Society of St. Louis (*Courier of Medicine*) Dr. HARDAWAY quotes our remarks as negative testimony against the oleate and so indeed it seemed. The testimony we offered, and from which he quoted, was put before the profession in the beginning of the malarial season, in order that a large number of experiments might be attempted, and so accumulate data for the future.

We have had some recent experience which, although confined to one case, tests the matter very thoroughly. A patient, having a great antipathy to quinine, was seized with a fever of a malarial type and of great irregularity as to its course.

It was determined to attack it by the use of the oleate of quinine epidermically, both for the reason of the antipathy the patient had for the remedy by the mouth and because the exacerbation was irregular, and a continuous impression of the remedy was necessary. The oleate was prepared of the strength, at first, of one dram of quinine (alkaloid) to two ounces of the acid, which was increased in strength to double the quantity of the alkaloid.

The inunctions were done at intervals of eight hours, consuming the two-ounce mixture during that time. The patient recognized cinchonism distinctly, but as the temperature occasionally reached 102.5° in the afternoon, the stronger oleate was applied. From this time daily tests were made of the urine, and despite the abundant coloring matter contained in it, quinine was distinctly visible by its green reaction with chlorine. Tests of the urine were continued several days after the cessation of the inunction, and quinine was detected. The inunctions in this case were done over a large area of

surface, but particularly in the groin and the inner side of the thighs and abdomen, and covered with waterproof paper to prevent being absorbed by the sheet. The infriktion was continued for a sufficient length of time to excite the skin to absorption, leaving very little unabsorbed oleate on the surface.

This case was that of an adult, of delicate blonde skin, but there is no doubt it would succeed with the same care upon most persons. For two weeks this patient did not take a particle of quinine by the mouth, and not until convalescence was evidently near at hand was any preparation of cinchona administered.

The cost of quinia alkaloid is so much greater than that of the sulphate just now, its use being somewhat new in the practice, that it is a heavy tax on some of our patients. It will eventually become cheaper, and while it can never supercede the internal administration of quinine, it will be very largely useful in many cases.

We have said nothing of the hypodermic use of the oleate, but we believe it will prove to be the very thing the profession has so long desired.—*N. C. Med. Jour.*

The Administration of Quinine.

Dr. DAVID YOUNG, of Rome (Italy), is of the opinion (*Practitioner*), that quinine is too indiscriminately administered in cases of fever, particularly in fevers which, occurring in malarial regions, are supposed to be more or less malarial in their nature. In such regions practitioners are too apt, he believes, "to give the benefit of the doubt" to almost any acute disorder ushered in by a chill and accompanied with a rise of temperature, and to treat such cases tentatively, in their early stages, when

exact diagnosis is often impossible, with antipyretic doses of quinine. While such practice may be to a certain extent necessary and justifiable, he believes it to be unjustifiable unless the physician exercises more than ordinary discrimination in persisting with the quinine treatment. Without such discrimination, he is satisfied, from eleven years' experience in a malarial city and region, not only that the quinine may fail to do good, but that it may prove of the greatest harm. He details his typical cases which began, to all appearances, as malarial fevers. In one, quinine treatment aggravated the symptoms and death took place on the third day. In the other, the symptoms grew steadily worse while antipyretic doses of quinine were administered, until a condition quite like that in delirium tremens was set up. A change of treatment to two-grain doses of calomel, ice to the head, and Apollinaris water was followed by gradual but complete cessation of the symptoms that had been so alarming. (The case proved to be one of typhoid fever and ran its course. The patient made a good recovery.) From these cases Dr. Young concludes: 1. When the bowels are confined and the urine is scanty, antipyretic doses of quinine should not be given. 2. In cases where quinine is being given, and an increase of dose is thought to be desirable, such increase is safe if the skin, bowels and kidneys maintain their functional activity. 3. During the administration of quinine, should a headache come on or increase in intensity, the case requires the most careful attention. Many physicians advise their patients who are about to travel in Italy to begin a regular course of quinine as soon as they cross the Italian frontier. This, in Dr. Young's opinion, is a pernicious practice. A considera-

ble number of English and American tourists suffer from actual cinchonism as a result of their following too assiduously this well-meant but unwise advice. Moreover, although both remittent and intermittent fevers appear to arise from the same cause, and although they present similar clinical features, and may even alternate and replace each other in the same individual, there is nevertheless a great difference in their respective behavior towards quinine. Quinine is a better prophylactic against intermittent than against remittent fever. Furthermore, while quinine maintains its curative power over cases of purely intermittent ague for a long period, its efficacy in remittent forms of the disease is often quickly spent, and in some cases is not manifested at all. In Rome, but a small proportion of tourists who suffer from fever are affected with the intermittent type.

Many patients have an idea that they cannot take quinine at all. Such notions are sometimes encouraged by physicians. A large proportion, at least, of these patients will tolerate quinine if it is administered in combination with other drugs. The therapeutic relations which exist between certain remedies are of great importance and deserve more investigation and consideration than they have hitherto received. Iron, for instance, with a saline, will often be well borne and produce good effects in cases in which, alone, it is not well borne. Cases of chronic intermittent ague will defy quinine and yield to arsenic, or, more curiously still, to Warburg's tincture, a preparation containing quinine in varying proportions as its chief ingredient, together with other apparently unimportant substances. Very many of the patients who have a constitutional antipathy to quinine, and believe therefore that they cannot take

it, are able to take the alkaloid if it is given with chloride of ammonium or a salt of potassium.—*N. Y. Med. Jour.*

Hydrobromic Acid.—A Warning.

Hydrobromic acid is again attracting attention, this time by Dr. C. D. DANA, of New York. In the doses he recommends it, that is 3 i. to 3 ij., even if considerably diluted or covered with syrup, it will frequently cause stomatitis. This condition will be first detected on the inside of the lower lip. We have had two troublesome cases of gastritis from the thrice daily administration of fifteen minim doses of the dense acid, diluted in syrup of tolu and water. The theory of the use of hydrobromic acid is good, and the practice as far as the taste goes, but the unpleasant stomatitis and gastritis must materially limit it.—*N. C. Med. Jour.*

An Acid Solution of the Hypophosphites.

GEORGE S. GERHARD (*Med. Times*): Mr. Hayes, of the St. George Pharmacy, has very successfully prepared, at my suggestion, a solution of the hypophosphites, without syrup, by dissolving the salts in water acidulated with hyposulphurous acid. The addition of a definite amount of this acid prevents the precipitation of at least two of the salts (iron and manganese), which in the syrups is accomplished by the protective power of the sugar.

The objection to the syrups is their excessive sweetness, and their liability to cause indigestion. The present solution, the formula of which I give below, is clear, slightly fluorescent, and pleasantly acid. It is a valuable tonic and stimulant, and is borne by the most sensitive stomach: Calcii hypophosphit, potassii hypophosphit, sodii hypophosphit, āā gr. j.; quiniæ hypophosphit,

manganesii hypophosphit, āā gr. $\frac{1}{4}$; ferri hypophosphit, gr. $\frac{1}{2}$; strychniæ hypophosphit, gr. 1-120; glycerinæ, ℥ iij.; liq. acidi hypophosphit, ℥ iij.; aquæ, ad. f. 3 j.

Digitalis Sweat.

Dr. J. M. LAZELLE states that tincture digitalis, long continued, produces a peculiar and remarkable kind of sweat over the whole body, resembling and representing the washerwoman's hands—the "washerwoman's skin." This is continuous, and will remain several days after discontinuing the remedy. The skin is bathed in perspiration, and is shriveled and corrugated. He claims that he has seen several cases of this sort, though the result is not mentioned in the books.—*Trans. Med. Soc. W. Va.*

The Antagonism of Paraldehyde to Strychnia.

Professor CERVELLO has recently published an interesting paper in *Archivio per le Scienze mediche*, vol. ii., no. 1, on the antagonistic action of paraldehyde and strychnia. The experiments which led him to regard the two drugs as antagonistic were made in several ways: by administering a large but not fatal dose of paraldehyde, and then a dose of strychnine; by administering fatal doses of strychnine, and then a dose of paraldehyde; and finally, by administering the two drugs at the same time. As a kind of control experiment, the animals were then given doses of one or the other of these agents alone, so that the experimenter could judge of the narcotic effect of the paraldehyde, and of the fatality of the strychnine. In whatever manner administered, it was made clear that paraldehyde antagonized the action of strychnia; nor was it necessary to administer more than a

physiological dose of paraldehyde in order to observe this antagonistic effect. Indeed, so small a dose of the narcotic was sufficient as not to produce its physiological effects. Two and a-half grammes of paraldehyde completely antagonized four milligrammes of nitrate of strychnia administered to a rabbit, a dose four times greater than that necessary to kill. Curiously enough, the administration of strychnia had no influence on paraldehyde narcosis. Its duration was the same, whether the narcotic was administered alone, or both drugs together; in fact, the narcosis lasted longer in the strychnized animal. The retardation of the respiratory movements is the same, and we may say that the phenomena of paraldehyde always predominate, as if it had been given alone. The antagonism, then, is not reciprocal. This antagonism seems, therefore, to be central: paraldehyde depressing, and strychnia exciting the reflex irritability of the cord.—*Medical Record.*

Reminiscences of Personal Experience in the History of Diphtheria.

The Doctor said his first acquaintance with diphtheria began in 1856, and since then he has come in contact with it in both civil and military practice; both sporadic and epidemic. He related the case of a diphtheritic patient who had hemorrhoids, which were attacked with the diphtheritic exudation and which extended high up the rectum and were thrown off in the stools. He says that no other disease had a tendency to death in so great a variety of ways, namely, by toxæmia, nephritis, suppression of urine, reflex paralysis, inanition, etc.; hence, we should always watch the direction from which death approaches, and direct our rem-

edies accordingly. He believes diphtheria and croup are different diseases, different in their etiology and pathology, which difference he intelligently pointed out. He never saw a case of croup followed by paralysis of the voluntary or reflex system of nerves, nor did he ever see kidney trouble follow membranous croup. In croup, membranous exudations never covered abrasions or sores on the cutaneous surface of the body. Such accidents in diphtheria were not only likely to happen, but were quite common. In croup the temperature is high, in diphtheria, such is the exception. In diphtheria the salivary glands are involved; in croup he had never seen such a complication. Diphtheria is infectious, croup is not. Diphtheritic poison produces a serious toxæmia, there is no such thing in croup.

In speaking of the treatment of diphtheria, he said that cauterizations were useless. Alum, tannin, tincture of chloride of iron, tincture of iodine, sulphate of copper, sulphate of zinc, and, indeed, every conceivable form of astringent, stimulant, alterant and caustic were used locally in this epidemic. The internal treatment consisted at first of emetics followed with mercurials. Afterwards, chlorate of potash, muriated tincture of iron, sulphate of quinine, belladonna, strychnine and alcohol. Disinfectants and antiseptics, were used in the form of spray inhalations, such as sulphurous and chlorinous vapors. There are always assimilative and digestive troubles. The writer used the following to the throat and nose with the syringe and atomizer: \mathcal{R} . listerine, $f \frac{3}{4}$ ss; cinnamon water, $f \frac{3}{4}$ iv; chlorinated solution of soda, $f \frac{3}{4}$ ss; carbolic acid, gtt. vi. M. Sig. Use with syringe or atomizer to throat and nose.

As an external application to the swollen salivary and cervical glands, he advises the following: \mathcal{R} . chloride of ammonia; chlorate of potash, $\text{āā} \frac{3}{4}$ ii; rose water; alcohol, $\text{āā} f \frac{3}{4}$ iii. M. Sig. Apply to the external swelling frequently and freely.

For the hemorrhagic form he advises oil of turpentine, ergot and digitalis internally, and locally, Monsel's solution diluted, used as a spray. Also: \mathcal{R} . Tinct. Ferri chloridi, $f \frac{3}{4}$ ii; potass, chloras, $\frac{3}{4}$ i; Tinct. nucis, vom., gtt, xx; tinct. digitalis, $f \frac{3}{4}$ ss; aqua, $f \frac{3}{4}$ iiss. M. Sig. Teaspoonful to a child one or two years old every two hours in water. \mathcal{R} . soda hyposulphite, $\frac{3}{4}$ ii; acid sulphurous, $f \frac{3}{4}$ iii; aqua, $f \frac{3}{4}$ ii; Glycerine, $f \frac{3}{4}$ i. M. Sig. Teaspoonful to be taken every hour.

Dr. Brown stated that Prof. Wm. Pepper, of Philadelphia, Pa., had written him that he used minute doses of bi-chloride of mercury, but that he, Dr. Brown, had had no experience with it.

Dr. Wm. Seldon, of Norfolk, Va., said that he had never seen a case of diphtheria die who took chlorine water prepared as follows: \mathcal{R} . Acid muriatic, $f \frac{3}{4}$ ss; potass. chloras, $\frac{3}{4}$ iiss; aqua, $f \frac{3}{4}$ iv. M. Sig. Teaspoonful every one-half hour, followed by whisky.

Locally he uses, \mathcal{R} . Alum, $\frac{3}{4}$ ii; acid salicylic $\frac{3}{4}$ i; sulphur, $\frac{3}{4}$ i; glycerine, q. s. M. Sig. Apply with camel-hair brush.—Dr. BEDFORD BROWN, *Atlan. Jour. of Med.*

Hydrargyrum cum Creta.

Dr. J. M. LAZELLE states that hydrargyrum cum creta, under some circumstances, and after long keeping, undergoes some kind of deterioration which renders it more or less poisonous, its action then resembling that of the bi-chloride of mercury. It becomes gran-

ular, hardened, decidedly so between the finger and thumb. In this state it has repeatedly been given to children in small doses with uniformly the same result, to wit: vomiting, purging, griping, and prostration. He does not attempt to explain the chemical change, but is certain as to the fact stated.—*Trans. State Med. Soc., W. Va.*

Treatment of Rheumatism.

Dr. TYSEN, in a clinical lecture published in *Med. Times*, closes with the following instructive remarks:

After a case has passed into the sub-acute form, as in the present instance, how is it to be treated? Is salicylic acid of any service in this condition? It may be, although less certainly than in acute rheumatism. At the same time, I am apt to begin the treatment with salicylic acid; but the method in which I have most confidence is that by counter-irritation by fly-blisters. A blister one or two inches square should be applied over the various joints in succession, and the counter-irritation kept up for weeks. In a case like this it is not always necessary to resort to so formidable a remedy as blisters. Painting the parts with iodine will sometimes cause absorption of the fluid and the disappearance of the symptoms. The internal use of iodine and iodide of potassium is also resorted to in these cases. Iodide of potassium may be given in doses of ten grains three times a day, or Lugol's solution may be substituted and continued for a considerable length of time.

The question has probably arisen in your minds: Is salicylate of sodium of service in what is called muscular rheumatism? It is not nearly so useful in this affection as in acute articular rheumatism. Although I have known it to

be occasionally of service in such cases, the best treatment in my experience for muscular rheumatism is dry and moist heat, and moist heat in the majority of cases. This form of heat is obtained by the use of hot baths. I have recently used, with much satisfaction, hot soda-baths, in which form half a pound to a pound of washing-soda is added to an ordinary bath of hot water. This should be taken on going to bed. The use of dry heat is also of service. One of the most annoying forms of muscular rheumatism is the ordinary stiff neck. The best remedy for this condition is a gum bag filled with hot water, on which the neck should be laid on going to bed. In the majority of cases the pain will have disappeared before morning.

To Cleanse the Gaiffe Battery.

Dr. F. A. BURRALL, of this city, writes: "I find that by putting salt and water into the cups of the Gaiffe battery, after they have been used, the yellow sulphate of binocide of mercury is readily removed from them. This method is a good substitute for the vigorous brushing and scraping which are otherwise necessary. Those who use this convenient faradizer will, I think, appreciate the benefit of this suggestion."—*Med. Record.*

DISEASES OF THE NERVOUS SYSTEM.

Note on Hyoscyamine.

Dr. R. A. HAYES, of Dublin, Ireland, reports (*Dublin Journal of Medical Science*), a case of tremor of the left arm which he treated with hyoscyamine. The patient, when he came under Dr. Hayes's care, had been troubled with this tremor for six months. Eighteen

months before it came on he had suffered an injury of the shoulder of the same side. He was given one sixteenth of a grain of hyoscyamine in pill. A single dose daily for two days produced no effect on the tremor. Next day two doses, morning and evening, relieved the tremor in some measure. The following morning a dose of one eighth of a grain was given. Delirium soon supervened, and continued through the day, but the tremor ceased. The next morning one sixteenth of a grain was followed by delirium, which did not completely pass off until the following day; but the tremor was decidedly controlled. The drug was now discontinued, it having completely paralyzed the patient's accommodation and interfered seriously with his sleep. The tremor returned at once, and soon became very marked. Three days afterward the hyoscyamine was resumed in doses of one thirty-second of a grain three times a day. In two days the tremor was lessened; in six days the ciliary muscle had again become paralyzed, and the medicine was stopped at the patient's request, though the tremor was much relieved. The smaller doses, while they did not affect the pupils, paralyzed the accommodation so completely that reading was impossible. It should be stated, however, that, when the administration of hyoscyamine was begun, the patient's eyes had not recovered from the effects of atropine, which had been used to facilitate an ophthalmoscopic examination. *Jour. de Med. de Bruxelles.*

The Relative Excitability of the Superficial and the Deep-seated Portions of the Brain.

The older anatomists held that the interior of the brain responded readily to the action of irritants, but that its surface was insensitive. Later inves-

tigations have shown this conclusion to be only partially correct, and that, at least in certain species of animals, portions of the cortical region are more or less sensitive. According to M. Franck and M. Pitié, the superficial cerebral layers are decidedly the most excitable. They found that electrical stimulation of the subcortical portions did not give rise to spasms. M. Cauty, however ("Gazette hebdom. de medecine et de chirurgie," Nov. 9, 1883), recently instituted a new series of experiments upon dogs and monkeys, the results of which tend to establish that the application of electricity produces precisely similar effects upon the white substance of the brain and upon its cortex; but that, conformably to the ancient idea, the sensibility of the white substance increases in proportion to its distance from the surface; or, more strictly speaking, in proportion as it approaches the occipital protuberance and the medulla oblongata—those real centers for the reception and diffusion of all cerebral impressions.

Reflex Nervous Influence Again.

We have had a great deal to say lately about reflex nervous influence, but if it causes some to look behind the manifest signs for the *cause* of departure from health, our purpose will have been accomplished. Prof. Henoch tells us in the *Wien, Med. Blatter* of a case of sudden aphasia in a three-year-old girl, which rapidly disappeared after vomiting an unchewed cherry.

Spasm of the Tongue.

E. GANGHOFFNER (*Centralbl. für die Med. Wiss.*) describes the following case: A youth, aged nineteen, had from infancy suffered under a spasmodic affection of the muscles of the tongue,

which, when he began to speak, protruded from his mouth. Simultaneously with this movement he experienced jerking of the right lower extremity. In repeating by heart a poem, in singing, or in rapid speaking the spasm of the tongue would pass off. The patient was anæmic, but otherwise in good health. When not speaking, he seemed to have nothing about him abnormal. His mother had suffered from deafness from her childhood; a brother also had presented a similar defect of speech; a sister was epileptic. Treatment by bromide of potassium had no influence over the spasms. Doubtless this was a case of chorea, the spasm of the tongue being a local manifestation of this neurosis.

Apomorphine in the treatment of Hystero-epilepsy.

In a recent number of the *Medical Times and Gazette*, T. HAMMOND WILLIAMS, L. R. C. P., gives notes of two cases of hystero-epilepsy in which he made use of apomorphine. Mental perturbation, he states, was marked in both cases. In one of them, he thinks, it was evidently the result of the uterine function being in abeyance. In the same case the vaso-motor system also seemed to be at fault, for, on pricking the skin, no blood appeared from the cutaneous arterioles and capillaries. The general nutrition and the condition were normal. Ovarian compression and the use of hydrate of chloral having proved of no avail, hypodermic injections of apomorphine were employed, one fifteenth of a grain at each injection. The first two injections failed to provoke vomiting, their action being retarded, the author thinks, by the fact that the patient was still under the influence of chloral. Finally emesis took place, followed by prostration, drowsi-

ness, and sleep. "The drug," says the author, "no doubt produced emesis by being carried into the circulation to the great nervous center in the medulla oblongata, where, by its action, it excited vomiting, besides causing nausea and depression of the circulatory system, and diminishing the muscular and nervous power. It therefore acts as a direct emetic upon the so-called vomiting center, but as an indirect emetic in relation to the stomach." *N. Y. Med. Jour.*

Laryngeal Chorea.

Mr. BLACHEZ recently reported to the Académie de Médecine two cases that he was pleased to term laryngeal chorea. The morbid condition manifested itself as a nervous cough, very like the hoarse barking sometimes observed in hysteria, of which condition, however, there were no other signs in the cases in question. *Med. & Surg. Reporter.*

The Differential Diagnosis of Tic Douloureux and Dental Neuralgia.

MAGITOT, of Paris, some time ago expressed the opinion that these two varieties of prosopalgia were clearly distinguishable by their symptoms alone. Tic douloureux he would define as an affection of the cutaneous branches of the trigeminus, occurring in paroxysms of an intermittent and spasmodic character which are provoked by the slightest contact or movement; while neuralgia originating in the teeth is always increased or diminished by forces acting upon the oral cavity, such as the pressure of foreign bodies, atmospheric air, heat, cold, certain drugs, etc., none of which exert any influence in the case of tic. This view is controverted by Dr. Th. Walzberg, in the "Centralblatt für Chirurgie," November 10, 1883. He maintains that there is nothing specially characteristic in the

symptoms of either complaint, and proposed to divide the facial neuralgias into two classes, viz.; those whose causes can, and those whose causes can not, be determined—the latter answering to the tic douloureux of Magitot. He adduces in confirmation three cases of prosopalgia successfully treated by himself. Concerning the first two of these he observes that they exhibit almost precisely the same assemblage of symptoms, yet that one of them certainly did not originate in the teeth, although presenting all the features characteristic of dental neuralgia, according to the French author. The third case, the symptoms of which would place it in Magitot's first class (tic douloureux)—and which also strongly resembled an intermittent disease—shows that a neuralgia may arise from the teeth, although entirely uninfluenced by agencies affecting the interior of the mouth. Symptoms in these complaints may facilitate the discovery of their causes, and so guide us to a successful plan of treatment, but only the most accurate objective examination in every case will protect effectually against error. It is better to search in vain for a tooth-root, upon the slightest suspicion, than uselessly to divide a nerve. A remark is appended relating to the mode of performing this operation. When it is designed to follow up to any considerable extent the ramifications of the infra-orbital nerve upon the cheek, it is better to make the entering (semicircular) incision at a point somewhat below the orbital wall; otherwise a pouch will be formed too small for separate drainage, but large enough to act as a reservoir for the secretions, with the result of setting up a suppuration which will much prolong the process of healing. The latter, under favorable circumstances, should not occupy over 5 days.

DISEASES OF THE URINARY ORGANS.

Nitroglycerine and the Chloride of Gold and Sodium in the Treatment of Albuminuria.

By Dr. ROBERTS BARTHOLOW (*Med. Med. Jour.*)—Chloride of gold and sodium have long been known to have a special direction to the genito-urinary apparatus. The ovarian and uterine organs in the female, the testes and vesiculæ seminales in the male, are stimulated by it, and the kidneys, by means of which it is eliminated, and in which it tends to accumulate, are decidedly affected by it in function and structure. In common with some other agents of the class to which gold belongs—for example, corrosive sublimate—the chloride acts on connective tissue and checks its over-production, or its hyperplasia. It would be quite impossible in this note to go over the evidence on these points, and hence I must ask your assent to these statements. They have been accepted as true of gold, from the days of the alchemists and iatro-chemists, as any one may ascertain from that curious collection of mediæval medical learning—the Anatomy of Melancholy. It has happened, strangely enough, that Hahnemann and his followers have profited by this knowledge, and have used gold preparations—especially *aurum potabile*—in the treatment of renal diseases with success.

How and when are these remedies to be used?

Nitroglycerine is now administered, as all present know, in the form of the centesimal solution—1 minim of the pure drug to 100 minims of alcohol. The initial dose of this one per cent. solution is one minim, which should be increased until the very characteristic physiological effects are produced. The

susceptibility to the action of nitroglycerine varies greatly, and hence the dose cannot be stated in advance. It is necessary to produce some obvious effect. To maintain the same level of action, a slight increase in the dose may be required from time to time. As the effect is not lasting, the interval between the doses should not exceed three or four hours.

The administration of nitroglycerine should begin in acute cases immediately after the subsidence of acute symptoms. It is indicated in chronic cases at all periods, but is more especially useful, if given before hypertrophy of the muscular layer of the arterioles has taken place. When it acts favorably, the amount of albumen in the urine steadily diminishes. The mechanism of its action consists in the lowering of the pressure in the renal vessels. How far any curative effect proceeds from action of this remedy on the sympathetic system, remains to be determined.

Chloride of gold and sodium is indicated in the subacute and chronic cases, especially the latter. The earlier it is given the better, if structural changes are to be prevented or arrested. The good effects to be expected from it will depend necessarily on the extent of the damage already inflicted on the kidneys.

The usual dose is $\frac{1}{20}$ grain, twice a day, but this may be much increased, if necessary. At the outset, $\frac{1}{10}$ grain may be given; in a week the dose should be lowered to $\frac{1}{15}$ grain, and after a month the regular dose of $\frac{1}{20}$ grain should be steadily pursued, with occasional intermissions. Indigestion, gastralgia and colic pains, nausea or diarrhœa, are occasionally caused by it; and if so, the quantity administered must be reduced. It is usually borne without any discomfort; but after prolonged ad-

ministration, salivation, weakness, emaciation, trembling, and other nervous phenomena may occur possibly. Such effects, however, are wanting in my experience.

The treatment of albuminuria by nitroglycerine and the chloride of gold and sodium, does not necessitate the exclusion of other means—hygienic, climatic, or dietetic. These remedies should, however, be given uncombined at different hours, and their actions should not be hindered or obscured by the effects of other agents given with like purpose. To this general statement there may be two exceptions: with nitroglycerine, amyl nitrite or sodium nitrite may be given; with the gold and sodium chloride, corrosive sublimate may be combined. If doubts may be felt in regard to the propriety of depending on the utility of these remedies, they need not be long experienced, for if no good effects are observed in two weeks, they may then be discontinued.

DISEASES OF CIRCULATORY ORGANS.

Heart Diseases.

DR. J. N. SALISBURY (*Colombus Med. Surg.*) Functional heart derangement is an unnatural heart action, not dependent on organic disease. *Palpitation*, is the most common functional derangement, which may be of short duration, or may continue for hours, or even days. The pulse may be very fast (120 or over), or very slow (40 or under), per minute. It may also be intermittent. But we should remember that in good health the pulse may be as slow as 40. Functional derangement is due to one or two causes: general nervousness, or reflex effects. Physical exhaustion may

produce it ; so also may anemia, rheumatism, indigestion, chorea, the use of alcoholic liquors or tobacco, uterine troubles, sexual excesses, etc.

How can we distinguish functional from organic derangement? 1. In organic disease exercise aggravates the symptoms, while functional derangement is benefited by exercise. 2. Functional derangements are paroxysmal, while organic are continuous. 3. Functional abnormal murmurs of the heart are always soft, while organic are always rough. 4. The distress is always much greater in functional than in organic derangements; 5. so that if your patient is sure he is going to die, you may be sure he is going to live,—that his troubles is only functional,—and purely functional derangement is never fatal.

The treatment for functional derangements is to avoid the causes. and cure the diseases that produce them. Prohibit entirely the use of whisky and tobacco. For a weak heart use digitalis. For a strong heart use aconite. If there is rheumatism, cure the rheumatism. If dyspepsia, relieve that. If worms remove them. If anemic or uterine troubles, restore to a healthy condition.

Enlargement of the Heart presents two conditions: Hypertrophy and Dilatation. Hypertrophy is increased of size, from increase of substance. Dilatation is enlargement of cavities without increase of substance. In hypertrophy the pulse is forcible, heaving but regular. In dilatation the pulse is feeble, irregular or intermittent. In either condition there is more or less dullness over heart. Where both conditions exist, the symptoms vary accordingly. Simple hypertrophy is never fatal. Dilatation is often fatal. For hypertrophy use tr. aconite—one, two, or three drops—three times a day, for months, and years, if necessary; for if long continued, excessive heart

action will cause hypertrophy; long continued diminished heart action will cure hypertrophy. Never use digitalis for hypertrophy. Aconite sustains systole, while digitalis sustains diastole, of heart. For dilatation, digitalis may prove beneficial, but should be used with caution. 1-40 to 1-16 of a gr. of sulph. of strychnine is an admirable remedy in dilatation and should be used for a long time. Iron is one of our best remedies. For both hypertrophy and dilatation, a generous, unstimulating diet, moderate exercise in the open air, and warm clothing, are essential. Excitement, active exercise, coffee, whisky and tobacco, should be prohibited. Belladonna plaster over the heart is good. If much pain, blister. For dyspnea use teaspoonful doses of equal parts Hoffman's anodyne and solution of morphine.

DIGESTIVE TRACT.

Alcohol on Digestion.

BUCHNER, in the *German Archives of Clinical Medicine*, reports the results of a series of experiments on the influence of alcohol on artificial and gastric digestion, as follows : 1. Alcohol by itself, up to ten per cent., has no effect on artificial digestion. 2. Increased to twenty per cent. the process is lengthened. 3. A still higher percentage stops digestion entirely. 4. Beer has the same effect if used undiluted. 5. Likewise the red and sweet wines, while white wine, pure, merely delays it. 6. In ordinary gastric digestion, beer appears to act unfavorably, even in small quantities. 7. Wine is the same. 8. When the absorption and secreting functions of the gastric mucous membrane are impaired, alcohol completely checks the progress of digestion.—*Qt. Jl. of Inebriety*.

Hope's Mixture.

This mixture is one commonly employed in the Southern States for simple diarrhœa. *Rx.* Aqua camphoræ, \bar{z} iv.; tinct. opii, gtt. xl.; acid nitricum, gtt. iv. *M.* Sig. Tablespoonful every three hours.—*Med. Student.*

Intestinal Worms a Cause of Invagination.

From the *Rev. Med.* we learn that in a number of autopsies practiced upon animals dying with symptoms of intestinal occlusion, M. MÉGNIN found in a certain number that the obstruction was due to intussusception. In nearly all these cases he found a large number of ascarides in the intestine, and thought that the irritation caused by their presence had induced such energetic peristaltic movements as to force a portion of the small intestine through the cæcal valve. The usually accepted causes of invagination are defective hygiene and enteritis, and it is probable that the intussusception in these cases was referable to an enteritis set up by the presence of large quantities of the lumbricoids, rather than to simple irritation.—*Med. and Surg. Reporter.*

Chronic Constipation.

Rx. Ext. cascar. sagrad. fl., glycerine, $\bar{a}\bar{a}$ \bar{z} i; tr. belladonnæ, m. x.; tr. nucis vom., \bar{z} ss. *M.* Sig. \bar{z} ss.— \bar{z} i, morning and night.

DISEASES OF RESPIRATORY ORGANS.**Oleum Lini in the Treatment of Pulmonary Phthisis and other Wasting Diseases.**

Dr. JOSEPH A. STITES, of Belmont, Nevada (*Cin. Lancet and Clinic*), advocates the use of oleum lini as a substitute for oleum morrhuæ in pulmonary phthisis and all other wasting diseases.

He has obtained better results with it than he could get with cod-liver oil, or with any of its emulsions. No attempt should be made to push the oil until diarrhœa is produced. The old rule requiring this should not be followed. Comparatively small doses are quite sufficient. Oleum lini may be made palatable by combining it with honey and with any of the maltine preparations, as in the following formula: *Rx.* Ol. lini (raw), \bar{z} j.; mel. rosæ, \bar{z} ss.; maltine, q. s., ad \bar{z} iv. *M.* Sig. A tablespoonful three times a day. If desired, brandy, whisky, or other alcoholic stimulant may be added. Thus prepared, either with or without any preparation of alcohol, linseed-oil will be taken by patients uncomplainingly, and oftentimes with a marked improvement in their nutrition, and with all the benefits which such improved nutrition produces. Children convalescing from fever or whooping-cough, or who are the victims of malnutrition from any cause, are benefited by oleum lini. They may be given a teaspoonful or more of the above-mentioned mixture, according to age. The old idea that linseed-oil impairs digestion Dr. Stites believes to be erroneous, if it be given in moderate doses and in a palatable form.

[As many of our readers are doubtless aware, linseed-oil has been used a good deal in Nevada of late years, at the suggestion of Dr. Samuel Sherwell, of Brooklyn. It has been found that bread made with a certain proportion of linseed-meal mixed with the flour is not unpalatable.]—*N. Y. Med. Jour.*

Cough Mixture.

Rx. Ammon. mur., \bar{z} ij.; morph. sulph., gr. j.; tr. aconit. rad., m. xvj.; ext. belladon., fl. m. v.; ext. glycyrrh., \bar{z} i.; syr. solut., \bar{z} i.; aq. ad., \bar{z} iv. *M.* Sig. \bar{z} j. every three or four hours.

CONSTITUTIONAL DISEASES.

Salicylic Acid in the Treatment of Cerebro-Spinal Meningitis.

Dr. D. C. RAMSEY (*St. Louis Courier of Medicine*): It was during the raging of an epidemic that I first noticed the analogy existing between it and acute articular rheumatism. The first point of departure from health at the commencement of the disease being frequently intense pain, referred to a knee or elbow joint, the pain being metastatic in character migrating from elbow to knee and vice versa, the pain also changing from knee to head, to elbow, being the same in character at each point.

All will agree as to the existence of an inflammation of the fibrous membranes of the brain and spinal cord in cerebro-spinal meningitis, and acute articular rheumatism being also an acute inflammation of fibrous membranes establishes their similitude.

Therefore, why should not the term "rheumatism of the membranes of the brain and spinal cord" be as good a name for the disease in question as cerebro-spinal meningitis? This similarity in the pathology of the two diseases once having become a general impression with the profession at large, the treatment will be more rational, more definite, and much more successful.

There occurred in my practice, during the epidemic mentioned, eleven cases of cerebro-spinal meningitis.

Four of them were treated with ergot, potassium bromide, chloral, aconite, quinia sulphate, morphia sulphate, and numerous other remedies; the result was three deaths and one recovery. The seven other cases were treated with

salicylic acid, with the result of five recoveries and but two deaths. They were all violent cases, and possessed the distressing characteristics of the disease in full.

I saw, during the illness of Drs. E. V. Spencer, M. S. Blunt, and J. B. Weever, of this place, a large number of cases of this disease which were in their care and under their treatment.

Acting on the idea advanced, as to its pathology being closely allied to that of rheumatism, caused me to use this great controller of that disease, and after having given it a fair trial, I can truthfully say that I have seen very happy effects, in fact wonderfully good results, from its use, and from my first trial of salicylic acid in the treatment of this dire disease I have never yet had occasion to regret using it.

I now say, without any hesitancy whatever, that salicylic acid will control the migratory pains of head, elbow and knee, and reduce the temperature in most, if not all, cases of cerebro-spinal meningitis. There was, in every case in which I prescribed it, great benefit perceived in the condition of the patients from the beginning of its use.

Salicylic acid far surpasses all the remedies that I have ever used in the treatment of this disease; it is the only one in which I have any faith whatever in the cure of it. It is now and always will be hereafter my chief reliance, unless there should be a more potent remedy discovered.

There are some cases where the hypodermic use of morphia is absolutely necessary to relieve pain until sufficient time has elapsed for salicylic acid to have its effect; that is, at the commencement of the disease, but once under the influence of the remedy there is, with a judicious continuance of its use, no further need for opiates to relieve pain.

Have tried salicylate of soda, but observed very little benefit from its use.

In the cases that recovered in my practice, the recovery was complete—that is, there was no resulting deafness, blindness, ankylosis or other deformity, which is something remarkable, for I saw here in the practice of other physicians, who were competent men, a number of cases in which there existed, after recovery from the disease, either deafness, blindness or ankylosis as a result of its action.

Conclusions.—1. The analogy existing between rheumatism and cerebro-spinal meningitis would suggest and be good reason for the use of similar remedies in both diseases. 2. Salicylic acid being the best remedy, almost a specific in the treatment of acute articular rheumatism, would be a strong indication for its use in cerebro-spinal meningitis. 3. It produces a marked reduction in the temperature; the fever being thus lowered, the tissue-destruction and the onward progress of the inflammation is checked, thereby giving the patient rest. 4. It controls the intensely annoying metastatic pains of head, back, elbow and knee, giving the patient ease. 5. It exerts a direct influence for good over the inflammation itself, and can be taken in frequent large doses without bad effect; having given a boy fifteen years of age half-dram doses every four hours for three or four days with the only result of a great benefit in all the symptoms connected with the disease, is, I think, conclusive evidence of its harmlessness. 6. Its good effects are soon apparent, and it does not interfere with the use of other measures of relief, as ice, blisters, etc. 7. The best mode of using the remedy is to administer large doses frequently. For adults, begin on doses of 15 grs., repeated every two hours, and increase the dose, as may be found nec-

essary to obtain the desired effect, to \mathfrak{D} ij, at intervals of two hours, if need be. When the disease is under control, which will be determined by the reduction in temperature, relief of pain and placid countenance, decrease the dose, give at longer intervals, but still continue the use of it in small doses as long as the least symptom is present indicative of the disease.

Having never heard or read of salicylic acid being used in the treatment of cerebro-spinal meningitis, and my good success with its use in this fearful epidemic being afterwards verified by Dr. J. B. Weever, of this place, I hope to induce others to give this remedy a trial, and by so doing I think they will be enabled to see very happy effects from its use and thereby be highly gratified with the results.

Warburg's Tincture in Miasmatic Fever.

Dr. METCALFE (*Medical Record*).—For many years in treating miasmatic fever which would not yield to quinia, I have been accustomed to prescribe Warburg's tincture. According to my experience it is worth all other succedanea put together.

About six years ago, a medical friend consulted me for intermittent fever, utterly rebellious to the power of the quinia salts. His health had suffered greatly and he was obliged to temporarily give up his practice. I prescribed the tincture of Warburg in half-ounce doses, taken on an empty stomach, early in the morning. It was rapidly and completely successful in its effect. Several months ago he applied to me with a recurrence of his old trouble, saying: "But Dr. don't give me Warburg. I think I'd almost as soon die as take it. Even when I look at the bottle containing it, I become nauseated. It is an awful dose to swallow!"

I begged him to go to his apothecary, have the tincture evaporated in a water-bath to such consistence as would allow it to be put into gelatine capsules and to take the equivalent of a half fluid ounce thus prepared.

It answered the desired end perfectly, without causing discomfort of any kind. Since then many patients have taken "Warburg's Capsules," with a like result. One of them contains the potency of two fluidrachms of the tincture. With some persons, rather too active purgation follows the ordinary dose of two capsules. This can be easily regulated by leaving out or diminishing the amount of aloes in the original formula.

I have had excellent results, also, follow administration of the capsules made by evaporating the modified Warburg's tincture, in which the alkaloids of cinchona replace the sulphate of quinine.

In cases of intermittent fever which are prone to recur, after having been once broken, I rely much more upon the daily dose of two capsules—taken early in the morning—than on any other remedy known to me.

The evaporated mass becomes hard very soon, unless glycerine be mixed with it before filling the gelatine cups.

Combinations with Quinine.

Dr. YOUNG has observed remittent and intermittent fevers occurring in three tolerably distinct clinical types.

The first resembles an ordinary case of influenza with nausea and disturbance of the bowels; the second is more like a sthenic fever with a dry pungent skin, bowels confined, great thirst and scanty flow of urine; while the third commences much like an attack of acute rheumatism.

In all these he finds quinine in com-

bination with other drugs more efficacious than when given alone. He recommends the following combinations in the three different types: *R.* Ammonii chloridi, ʒ ij.; quiniæ bisulphatis, grs. xlvij.; ext. glycyrrhizæ, ʒ iij.; aquæ, q. s. ad ʒ vj. *M.* Sig. A tablespoonful in half a wineglassful of water every six hours. *R.* Potassæ citratis, ʒ iv.; quiniæ citratis, ʒ j.; syr. zingiberis, ʒ vj.; aquæ, q. s. ad ʒ vj. *M.* Directions same as above. *R.* Sodæ salicylat., ʒ j.; quiniæ salicylat., grs. xlvij.; syr. zingiberis, ʒ vj.; aquæ, q. s. ad ʒ vj. *M.* Directions same as above.—*The Practitioner.*

Conium in Malarial Diseases.

Dr. RICHARD C. NEWTON tells the *Med. Record* that during the summer and spring of this year he has used repeatedly the following prescription: *R.* Ext. conii fld., ʒ j. ʒ ij.; ferri perox, ʒ iij.; spts. vini gallici, ʒ iss.; quin. sulph., ʒ ss.; syr. simp., ʒ iij.; ol. menth. pip., ʒ iij. *M.* Sig. ʒ j. q. four hours until two hours before the chill is expected, then q. two hours for two or three doses, then q. four hours. To children it has been given very successfully by doubling the amount of syrup.—*Med. & Surg. Reporter.*

Local Treatment of Erysipelas.

An epidemic of fifty cases of erysipelas gave POLYANYI an opportunity of making comparative observations of different methods of treatment. The best results were given by applications of freshly-prepared sulphurous-acid solution, made carefully every two hours over every part of the affected surface. J. Andeer prefers a fifty to eighty per cent. ointment of resorcin.—*Wiener Med. Presse.—Med. Times.*

Rectal Watering.

There does not seem to be any good reason against the suggestion offered by Dr. GOFFORD in the *Miss. Valley Med. Mo.* for October, that when the stomach of a fevered patient rejects the water for which his system is craving, it should be administered per enema, and he reports two cases in which this procedure was satisfactorily resorted to.—*Med. & Surg. Reporter.*

Alcohol in Trichinosis.

Fortunately trichinosis is a comparatively rare disease, but when it does occur, the physician who endeavors to cure it has his hands full. Hence, it is well to remember that Dr. Ferrer (*Gac. de les Hopitals, Valencia*) has had most gratifying results in one case from the use of alcohol. The disease had existed for four weeks, when this treatment was commenced. He commenced with six and increased to nine ounces daily, in sugared water, in the intervals of feeding. The patient was completely well in eighteen days.—*Ibid.*

Bromide and Iodide of Sodium; their Therapeutic Advantages over Bromide and Iodide of Potassium.

Dr. T. J. HUDSON, M.B., says, in the *Lancet*: Experiment has shown that potassium and its salts are much more poisonous than those of sodium on the entire organism, and much greater depressants, both general and local. Bromide of sodium is now very largely used in America in preference to the potash salt, and I was induced to try it fully after observing the bad effects of the latter when given in large doses for insomnia (among which were general depression, mental and bodily malaise, and irritability of temper the next day), or in smaller and long-continued ones

for epilepsy, etc., an almost toxic effect being often induced, showing itself in mental weakness, clouded intellect, failure of memory, with an expression of hebetude, passing on to temporary imbecility, and also so-called "bromism," whether owing in part or whole to the potash remains to be seen, but doubtless due to a great extent to induced diminished elimination of carbonic acid. Its acrid taste (like salt water) is often objected to, and may cause diarrhea and vomiting in the feeble, anorexia and sour eructations. The bromide of sodium lacks many of these disadvantages. After large doses for insomnia, etc., there is much less depression, and in smaller ones for long periods the toxic effects are slight; so far I have observed no symptoms of bromism nor any skin eruptions. Neither dyspepsia nor acidity of the primæ viæ is caused by it, but these conditions are much diminished if beforehand existing; the taste is less objectionable; it constipates rather than the reverse, and has greater tonic action than the potash combination, but is contra indicated with much phosphates in the urine. There being rather less bromine in the soda than the potash salt, the former should be given in somewhat larger doses. Roughly, fourteen grains of the soda salt compound to twelve of the potash.

The following were some of the diseases I have treated exclusively by it. Of pertussis (uncomplicated) eighty-seven cases were treated, ranging in age from two months to twelve years, the dose varying from three grains to half a dram, not oftener than every three or four hours night and day, the average length of treatment being four to seven weeks. Twenty-seven were entirely cured by the drug. Forty, not showing any great improvement after two or three weeks' treatment, had other drugs

combined with it, and the remainder showed no improvement or failed to attend. The cases somewhat relieved were cured by bromide of potassium and belladonna liniment to the throat externally. The potash salt, therefore, has greater effect on pertussis than the soda one, owing to its greater depressant action on the cerebrum, etc., and I should give it the preference unless great weakness already exists, as in rickety infants and others. In women approaching the menopause and suffering from the usual train of nervous symptoms, with abdominal and cranial pains, tinnitus aurium and flatulent dyspepsia, the soda salt in half-dram doses causes less depression and sinking than the potash one, and the dyspepsia also is relieved and soon cured. In menorrhagia and metrorrhagia from whatever cause, there is no difference between the action of the two drugs. In the weary muscular pains following severe straining, as after diarrhea, etc., the soda salt is of great comfort, and brings on no return of the looseness, as the potash one often has done in my experience. In various forms of headache, neuralgia, and nerve excitement where a hypnotic is needed, the soda salt in large doses is followed by little or no sign of lassitude or sense of weakness, as is often seen after the potash one. This applies to insomnia from whatever cause arising, also to puerperal mania with great depression. The hypnotic action not being so great as that of bromide of potash, a larger dose (one fifth) was always given in these cases. It is also useful in incipient and pronounced delirium tremens, also in hysteria and chorea, and is longer than the other salt in making a decided impression when pushed in these cases.

In several severe cardiac cases, where pain and insomnia threatened to bring

on dementia (and also in cardiac cases complicated with epilepsy) and where I feared the depressant and toxic action of the potash salt (hypodermic morphia being contra-indicated owing to renal disease), fifty to eighty grains of sodium bromide caused several hours' sleep without affecting the heart-muscle to any extent, this being given for many nights. It is also of great use in irritable and palpitating heart, without organic lesion, as in excessive tea and coffee drinking, and when of dyspeptic origin. In *petit mal* no difference was noted between the drugs, but in the graver form the soda salt could be administered for periods of eight or ten months (the longest time under observation) with far less toxic signs or those of depression. In seventeen cases where the drug was given for this period with great benefit up to ninety grains thrice daily, no signs of "bromism," etc., appeared. One interesting case in point presented itself, that of a boy, aged twelve, who had taken for epilepsy three or more drams of the potash salt usually thrice daily during four years. He had now a fit every two or three weeks, and but mildly. He frequently fainted, the pulse being slow and intermittent, and the bowels very confined. He had quite lost memory, was silly, and had always a curious expression of hebetude and languor. Several times he tried to drown himself, and would run about the streets naked unless closely watched. Up to the age of eight he was "like other boys," and had never experienced an accident or any head injury. The drug was omitted for six weeks, during which he had two fits (sixth week), and became more rational and intelligent. He was now put upon ten grains of sodium bromide thrice daily, and had no attacks for ten weeks, but then failed to attend.

Cases occur in which, great pain being suffered, opium or its alkaloid is inadmissible or injurious, as in renal disease, cancer of rectum, etc. I have tried the soda salt in several such cases, pushing it to ninety grains every two or three hours with some aromatic, and found it of great benefit. It has made the patient easy and comfortable, not having interfered with the excretions or secretions, nor produced any signs of "bromism." In five cases the drug was given for ulcers together as above. As a lotion for irritable throat or for spasm (as in fissure of anus) the potash salt is best. The iodide of sodium was tried in syphilis and aneurism. In the former it could be given in larger and more continued doses than the iodide of potassium without causing the depression of spirits feeling of misery, anorexia, and irritant effects on the mucous membranes to any extent, but its action was slower on the nocturnal pains and also those of rheumatism. In aneurism it acted far less beneficially than the potash in depressing, etc., the circulation, though never objected to on account of its taste. Its alterative power seems greater, and iodism was not present even when pushed to one dram thrice daily, but the observations were not long enough to test this point fully. Clinical evidence thus shows that if we do not wish a large quantity of somewhat poisonous potash to be present in the blood at one time, owing to the bromide of potash given, the latter must be taken in small doses over a long period; but often the best results are only attained by pushing the drug, and that for a considerable time. In such cases the bromide of sodium is better. It would also appear that the bromide and iodide of sodium are better than those of potassium if we wish for the action of the bromine or iodine only on the system, but, where we de-

sire the depressing and sedative actions to co-operate, as in pertussis, aneurism, etc., then the potash salts are preferable, the alkali potash contributing by far the greater share towards these effects—*Louisville Med. News.*

Treatment of Acute Rheumatism.

Some of the remedies in vogue at the present period, to which I wish to draw your attention, and which I have employed successfully, are first—the alkalis. They are, I think, especially indicated in plethoric subjects, but they are no less useful in all persons not too ænemic. The alkaline carbonates are to be preferred and should be employed sufficiently to render the urine alkaline.

Salicin, or salicylic acid, the former being less dangerous, next claim our attention, and well they can, for they are the treatment in a great many cases. The following has proved very effective in my hands, especially after the urine had been rendered alkaline. *R.* Acid salicyl., 1-2 ounce; *tr.* colchici sem., 1-2 ounce; *sodii bicarb.*, 6 drachms; *aquæ q. s.*, ad., 4 ounces. *M. Sig.*—Teaspoonful three or four times a day.

The quantities being increased or diminished according to the severity of the case. Blisters in some cases gave marked relief, while in others nothing but palliatives would answer. If the hyperpyrexia was intense I employed quinia in repeated doses, cold sponging or the vinegar vapor bath.—Dr. J. F. MENTZER, *Med. Brief.*

A Liniment for Rheumatism.

The Quarterly Therapeutic Review says, methyl salicylate (oil of winter-green) mixed with an equal quantity of olive oil or linimentum saponis, applied externally to inflamed joints affected

by acute rheumatism, affords instant relief, and, having a pleasant odor, its use is very agreeable.

Boracic Acid.

Dr. SQUIBB writes of boracic acid or, more properly, according to the nomenclature of the late Pharmacopœia, *boric acid*, as follows: "If the powder be needed, as is generally the case, it should be specified in the prescription. The powder should be very fine, and should be white and light, and entirely free from particles when rubbed between the finger and thumb, feeling very like powdered soap. It is only such powder that answers well in eye surgery or general surgery for dressings, and solutions are also best made from it. A saturated solution contains about nineteen grains to the ounce, and from ten grains in the ounce to saturation it is used as an eye-wash or to granulating and suppurating surfaces. It is a very bland and soothing application, both in powder or solution, relieving irritation and arresting suppuration. It is a potent antiseptic, much less expensive than salicylic acid, and is odorless and more easily managed than carbolic acid. It is probably better than either to preserve hypodermatic solutions. In surgical dressings it has the great advantage over carbolic acid of not being irritant nor poisonous. But not being volatile it does not deodorize the air."—*Ephemeris*.

To Detect Adulterations in Olive Oil.

According to the *Moniteur de la Pharmacie* cotton-seed oil, when used as an adulteration or substitute for olive oil, may be detected by the following test: Put one part by weight of the oil to be tested in a test tube with two parts of pure colorless nitric acid, shake thoroughly for thirty seconds, and then

let the test tube stand for five or six minutes. At the end of this time the oil will rise above the acid. If the olive oil is unadulterated it will be of a light gray color with a yellowish tinge, but cotton-seed oil will assume a dark brown, almost black, coffee color. Varying shades from a golden yellow to brown, according to the proportions of the admixture, will be produced in adulterated oil. By this method it is possible to detect the presence of five per cent. of cotton-seed oil.

Lymphatic Discharge from the Nose in Leucocythæmia.

Dr. CORNIL relates the case of a patient suffering from leucocythæmia who had a discharge from the nose of a thick, transparent, glairy fluid. It flowed slowly, but constantly, and was neither thin like the discharge of a commencing coryza nor opaque like that of a more advanced nasal catarrh, but contained a large quantity of white corpuscles. The patient did not sneeze nor were there any tickling sensations in the nose. At the autopsy the mucous membrane of the nasal fossæ was seen to be smooth, without ulceration, but thickened in places. The thickened parts presented a gray color on section. They were formed by an infiltration of the connective tissue with a mucous, transparent fluid, like lymph. It was this leucæmic infiltration of the Schneiderian mucous membrane which was the cause of the nasal lymphorrhœa.—*Revue Médicale*.

Directions for Using Hot Water According to the Salisbary Plans.

1, *The water must be hot; not cold or lukewarm.*—This is to excite downward peristalsis of the alimentary canal. Cold water depresses, as it uses animal heat to bring it up to the temperature of

the economy, and there is a loss of nerve force in this proceeding.

Lukewarm water excites upward peristalsis, or vomiting, as is well known. By hot water is meant a temperature of 110° to 150° F., such as is commonly liked in the use of tea and coffee. In cases of diarrhœa the hotter the better. In cases of hemorrhage the temperature should be at blood heat. Ice water is disallowed in all cases, sick or well.

2. *Quantity of hot water at a draught.*—Dr. Salisbury first began with one-half pint of hot water, but he found it was not enough to wash out nor to bear another test founded on the physiological fact that the urine of a healthy babe suckling a healthy mother (the best standard of health) stands at a specific gravity varying from 1015 to 1020. The urine of the patient should be made to conform to this standard, and the daily use of the urinometer tells whether the patient drinks enough or too much hot water. For example, if the specific gravity of the urine stands at 1030, more hot water should be drunk, unless there is a loss by sweating. On the other hand, should the specific gravity fall to 110, less hot water should be drunk. The quantity of hot water varies usually from one-half to one pint or one and a half pints at one time drinking.

The urine to be tested should be the "urina sanguinis," or that voided just after rising from bed in the morning, before any meals or drinks are taken.

The quantity of urine voided in twenty-four hours should measure from forty-eight to sixty-four ounces. The amount will, of course, vary somewhat with the temperature of the atmosphere, exercise, sweating, etc., but the hot water must be given so as to keep the specific gravity of the infant's standard, to wit: 1015 to 1020. The urinometer

will detect at once whether the proper amount of hot water has been drunk, no matter whether the patient is present or absent. Another test is that of odor. The urine should be devoid of the rank "urinus" smell so well known, but indescribable.

The Salisbury plans aim for this in all cases, and when the patients are true and faithful the aim is realized.

3. *Times of taking hot water.*—One hour to two hours before each meal, and half an hour before retiring to bed.

At first, Dr. Salisbury tried the time of one-half hour before meals, but this was apt to be followed by vomiting. One hour to two hours allows the hot water time enough to get out of the stomach before the food enters or sleep comes, and thus avoids vomiting. Four times a day gives an amount of hot water sufficient to bring the urine to the right specific gravity, quantity, color, odor and freedom from deposit on cooling. If patient leaves out one dose of hot water during an astronomical day, the omission will show in the increased specific gravity as indicated by the urinometer in the color, etc. Should the patient be thirsty between meals, eight ounces of hot water can be taken any time between two hours after a meal and one hour before the next meal. This is to avoid diluting the food in the stomach with water.

4. *Mode of taking hot water.*—In drinking the hot water it should be sipped, and not drunk so fast as to distend the stomach and make it feel uncomfortable. From fifteen to twenty minutes may be consumed during the drinking of the hot water.

5. *The length of time to continue the use of hot water.*—Six months is generally required to wash out the liver and intestines thoroughly.

As it promotes health, the procedure

can be practiced, by well people throughout life, and the benefits of "cleanliness inside" be enjoyed. The drag and friction on human existence from the effects of fermentation, foulness, and indigestible food, when removed, gives life a wonderful elasticity and buoyancy, somewhat like that of the babe above alluded to.

6. *Additions to hot water.*—To make it palatable, in case it is desired, and to medicate the hot water, aromatic spirits of ammonia, clover tea blossoms, ginger, lemon juice, sage, salt, and sulphate of magnesia are sometimes added. Where there is intense thirst and dryness, a pinch of chloride of calcium or nitrate of potash may be added, to allay thirst and leave a moistened film over the parched and dry mucous membrane surfaces. When there is diarrhœa, cinnamon, ginger, and pepper may be boiled in the water, and the quantity drunk lessened. For constipation a teaspoonful of sulphate of magnesia, or one-half teaspoonful of taraxacum may be used in the hot water.

7. *Amount of liquid to be drunk at a meal.*—Not more than eight ounces. This is in order to not unduly dilute the gastric juice, or wash it out prematurely and thus interfere with the digestive processes.

8. *The effects of drinking hot water* as indicated are the improved feelings of the patient. The fæces become black with bile washed down its normal channel. This blackness of fæces lasts for more than six months, but the intolerable fetid odor of ordinary fæces is abated, and the smell approximates the smell of healthy infants sucking healthy breasts, and this shows that the ordinary nuisance of fetid fæces is due to a want of washing out and cleansing the alimentary canal from its fermenting contents. The urine is clear as cham-

paign, free from deposit on cooling or odor, 1015 to 1020 specific gravity, like infants' urine. The sweat starts freely after drinking, giving a true bath from center of body to periphery. The skin becomes healthy in feel and looks. The digestion is correspondingly improved, and with this improvement comes a better working of the machine. All thirst and dry mucous membranes disappear in a few days, and a moist condition of the mucous membrane and the skin takes place. Ice water in hot weather is not craved for, and those who have drunk ice water freely are cured of the propensity. Inebriety has a strong foe in the use of hot water.—*Med. Brief.*

Prevention of Pitting in Small-Pox.

We take the following from the *Polyclinic*. SCHWIMMER recommends the local application of carbolic acid and thymol. He prescribes as follows: \mathcal{R} . Acid carbol., 3 j.; ol. oliv., 3 viij.; cretæ. prep., \bar{z} iss. M. Or, \mathcal{R} . Thymol, 3 j.; ol. lini., 3 viij.; cret. prep., \bar{z} iss. M.

Value of Tracheotomy in Diphtheria.

Dr. W. H. HUMISTON thus concludes an interesting article in the *Columbus Med. Journal*: I believe it is our duty in every case where tracheal obstruction is producing death to perform tracheotomy. The relief is marked and the child and friends are so grateful for the subsidence of the terrible struggling for breath, that should death occur several hours later, they would have the satisfaction, as well as yourself, that all means in your power had been resorted to to avert death that would soon have followed had not the operation been made. I do not resort to the operation as long as there is no marked failure of the heart, for occasionally a case will

recover by persevering with appropriate treatment.

The after-care of a tracheotomy case is very important, and it is right here that so many are lost :

1. The room should be of good size and adjoining a room that opens out of doors ; in this adjoining room a window should be open constantly, allowing a constant and gradual change of air. Keep the room at a temperature of 80° , and the air impregnated with the steam from lime water, by having a kettle on the stove. Make a tent with sheets over the bed in which the patient lies. Have a tin can made with a long tube attached to conduct the steam inside the tent. This can may be constructed so that it will rest upon a small oil stove, which will produce sufficient steam with great regularity and with but very little attention. These sheets should be removed every hour in order to change the air, but with the temperature of the room constantly at 80° no ill effects are produced. The next best thing to this is the Codman & Shurtleff steam atomizer kept constantly at work and the steam striking directly over the mouth of the tube. Omit this for but ten minutes and the child becomes restless and the breathing more difficult.

2. Another important point is to have constant professional attendance for the first thirty-six hours, for so many complications are apt to arise that unless immediate assistance is at hand the case may be lost ; as for instance the occlusion of the tube by detached membranes, violent coughing, and the tearing out of the tube by the child. The friends for a time lose all control, and are afraid to touch the child or do anything for it, and it is essential to have some one that can act in an emergency. Active supportive medication should be continued as before the operation.

In eleven cases operated upon I have been successful in four, with a possible five. Ten of these had membranous formation covering both tonsils ; in fact, were diphtheritic, as the sequelæ that followed the recovered cases plainly indicated. I lost one case the third day after the operation, when all symptoms were favorable, from hemorrhage produced by the child tearing out the tube. The lungs quickly filled with blood, and it died just as I reached the house. This case had progressed so far that recovery was assured. Indeed, it is unusual for death to occur after the third day. Three cases operated upon during the night time, two recovered. In nineteen cases seen in four years where tracheotomy seemed necessary and was urged strongly, but declined, not one recovered.

I would emphasize the lesson that this experience has taught me ; that is, that in a large percentage of the cases of laryngeal obstruction, from whatever cause, be it membranous croup or croupous diphtheria, tracheotomy is the only resource that offers any hope of success, and any medicinal measures adopted should never be of such a nature as to unfit the patient for that operation.

The Contagion of Tuberculosis.

The following are the conclusions arrived at by M. DAREMBERG, in a communication addressed to the Academy of Medicine of Paris (*Bulletin de l'Académie*) : 1. Tuberculosis is a disease of parasitic nature, transmissible by inoculation, alimentation, or inhalation. 2. It is always caused by the absorption of a germ from without. 3. When occurring by inhalation the quantity of the contagion is of little moment. It can operate only in a suitable soil. In a word, contagion is an influence to which

all are exposed, but which is operative only in those individuals in whom hereditary or acquired vices of nutrition have prepared a field suited to the growth and reproduction of the germ. 4. Local and general tubercloses differ only in degree. 5. Scrofula appears to be a diathesis, while tuberculosis is an infection engrafted upon diatheses. 6. The infectious germs of tuberculosis are not usually inherited, but rather the vices of nutrition which have provoked the disease in the ancestors. 7. Therapy, while permitted to seek for specifics, ought, in the way of prophylaxis, to aim at the destruction, through general hygiene, of the causes which prepare a fit soil for the reception of the tuberculous contagion. After the disease is established it should seek to combat the phenomena arising in the economy from the presence and proliferation of the infectious agent.

Sweating in Phthisis.

Speaking of the unsatisfactory results of all the remedies recommended for this condition, Dr. J. R. FORREST thus writes to the *Lancet*: I have found the following a most efficacious lotion: \mathcal{R} . Sulphate of zinc, gr. iv.; tincture of belladonna, 3j.; water, \mathfrak{z} j. The body to be sponged with the lotion at bedtime. It has proved serviceable in my experience in cases both of the incipient and advanced disease, the excessive sweating being often quite restrained after two nights' sponging.—*Med. & Surg. Reporter*.

A Pleasant Disinfectant for Rooms.

From an Italian journal we note that a few drops of the following mixture on a plate will pleasantly disinfect a bedroom: Camphor, 20; hypochlorite of lime, alcohol, and water, of each, 50;

eucalyptus and oil of cloves, of each 1 part. The ingredients must be mixed slowly in a cool, spacious vessel.—*Ibid*.

Action of Tobacco on the Temperature and Pulse.

Dr. TROITSKI has made a number of observations upon the effects produced on the temperature and pulse by smoking. He found that in every case, varying according to the condition of the individual, there was an acceleration of the pulse rate and a slight elevation of temperature. If the average temperature of non-smokers were represented by 1,000, that of moderate smokers would be 1,008, and while the heart in the former case was making 1,000 pulsations, in the latter it would beat 1,180 times. It is in the latter effect that he thinks the danger of tobacco smoking is manifested.—*Journal de Médecine de Bruxelles*.

Treatment of Facial Erysipelas with Iodide of Potassium.

Dr. J. B. JOHNSON, in a letter to *Med. and Surg. Reporter*, gives the following treatment for this disease:

As the tongue is always more or less coated, I usually introduce my treatment by a dose of pills composed of, blue mass, grs. x.; calomel, grs. v. M. In three pills divide. To be taken in one dose; and to be followed in three or four hours by a dose of sulphate of magnesia; and without waiting for the action of the pills and salts, I immediately commence. \mathcal{R} . Iodide of potassium, 3j.; tinct. hyoscyamus, \mathfrak{z} ij.; tinct. acornite leaves, gtt. xij.; aquæ distil., \mathfrak{z} vj. M. A tablespoonful every hour, day and night, when the patient is awake; and I have the face bathed every two or three hours, and constantly covered with a linen cloth, satu-

rated with the following solution: *R.* Hyposulphite of soda, \mathfrak{z} j.; carbolic acid, No 1, \mathfrak{z} jss.; aquæ distil., \mathfrak{z} viij. *M.* This allays most promptly the burning and itching sensation of the skin and face, and is in nowise disagreeable.

This treatment I have always found to arrest the erysipelas almost at once, and my patient to be about his room in four or five days. My cases have not only escaped complications of congestion and inflammation of the brain, but of the throat also, and without the use of either iron, quinine or wine, five-grain doses of iodide of potassium every hour have never disappointed me in their action; and without the vigor of therapeutical enthusiasm, long experience has enabled me to declare, in my opinion, the internal use of iodide of potassium to be a specific for facial erysipelas.

DISEASES OF THE NERVOUS SYSTEM.

A Precaution in Convalescence from Scurvy.

In the *Cinn. Lan. and Clin.*, Dr. JOSEPH EICHBERG calls attention to the necessity of absolute and resolute maintainance of the horizontal posture until recovery is pretty well advanced.

Patients who seemed to be in the best of spirits and in a fair way to recovery, have died instantly upon making a sudden exertion. The transfer from a vessel to a hospital in the harbor, the endeavor to leave the room, or the effort to sit up in bed, have all been attended by the direst results. The fatal termination in these cases is undoubtedly due to syncope, occasioned either by the diminished power of the heart, reduced as this organ sometimes is to one-third of its usual bulk, or, as suggested by Aitken, to embolism from an

altered state of the fibrin.—*Med. & Surg. Reporter.*

The Localization of Motor Lesions in the Cerebral Cortex.

From a careful analysis of a long series of clinical cases Messrs. CHARCOT and PITRÉS draw the following conclusions as to the production of motor lesions in disease of the cerebral cortex in man:

1. All the cortical lesions of the cerebral hemispheres in man do not give rise to disturbances of voluntary motion. In this special point of view the cerebral cortex may be divided into two distinct districts,—the *non-motor zone*, whose destruction never produces permanent paralysis, and the *motor zone*, in which destructive lesions always produce permanent paralysis on the opposite side of the body.

2. The non-motor zone includes—1, all the pre-frontal region of the brain (orbital lobe and first, second, and third frontal convolutions); 2, the entire occipito-parietal region (the occipital lobe and the superior and inferior parietal lobules); and, 3, all the temporo-sphenoidal lobe.

3. The motor zone includes solely the frontal and ascending parietal convolutions and the paracentral lobule.

4. Paralyzes produced by destructive cortical lesions have different clinical characteristics according to the seat and extent of the lesions. Total hemiplegias of cortical origin are produced by extensive lesions of the ascending convolutions; partial palsies are produced by limited destruction of the same localities.

Among these partial paralyzes, or monoplegias, the following may be recognized:

- a. Brachio-facial monoplegias, which coincide with lesions of the inferior half

of the ascending convolutions; *b*. Brachio-crural monoplegias, depending upon lesions of the upper half of the ascending convolutions; *c*. Facial and lingual monoplegias, which depend upon very limited lesions of the inferior extremity of the motor zone, and particularly of the ascending frontal; *d*. Bracial monoplegias depend upon very limited lesions of the middle portion of the motor zone, particularly of the middle third of the ascending frontal; *e*. Crural monoplegias depend upon very limited lesions of the paracentral lobule.

5. Whether total or partial, paralyses produced by destructive cortical lesions are permanent, and, after a certain time, are accompanied by secondary *contracture* of the palsied muscles and descending degeneration of the pyramidal strands.

6. Irritative lesions of the cortex may cause epileptiform convulsions (partial, Jacksonian, or cortical epilepsy). Such convulsions may be very readily distinguished from true epilepsy, as they originate with a motor aura, and may be either general or confined to one-half the body (hemispasm) or to a single group of muscles (monospasm).

7. As a rule, lesions capable of producing epileptiform convulsions are situated in the neighborhood of that cortical region whose destruction would produce paralysis in the muscles first affected. The causative lesions may, however, be found either in the motor or the non-motor zone, and no such definite relation between the character of the epilepsy and the location of the cortical lesion can be fixed as exists between paralyses of cortical origin and the lesions producing them.

8. The history of motor localizations in man is founded upon the comparison of many hundreds of concordant and careful observations. There is not one

of the facts regarded as opposed to the doctrine of cerebral localization, but is open to criticism; there is not a single opposing fact capable of demonstration. All the observations reported as disproving the fact of localization are unreliable, either on account of the complex nature of the lesion (multiple lesions, effusions, tumors, etc.), or because unaccompanied by sufficient details.—*Revue de Médecine*.—*Med. Times*.

DIGESTIVE TRACT.

Acute Subumbilical Peritonitis.

By Dr. A. GOIX (*Arch. de Med.*) It manifests itself clinically: 1. By the general symptoms of an acute peritonitis; 2. by local phenomena, such as superficial pains, limited to the subumbilical region of the abdomen, retention of urine and intestinal meteorismus; 3. by a very important negative characteristic—the integrity of diaphragmatic respiration.

It is distinguished from acute *perityphlitis* by the absence of cæcal and pericæcal tumefaction, and from subperitoneal *phlegmon* by the conservation, during the entire course of the disease, of the normal mobility of the skin over the subjacent tissues.

What makes the gravity of acute peritonitis is its extension to the peritoneum above the umbilicus. It is therefore of the highest importance to watch carefully the respiratory rhythm, and the movement of the diaphragm.

A Reliable Tæniafuge.

R. Extracti filicis macis, ʒ iss.; pulveris kamalæ, ʒ ij.; mucilaginis acaciæ; syrupi simplicis, aa ʒ ij.; aquæ cinnamoni, ad ʒ iij. M. S. Half to be taken at bed time, and the other half early in

the morning. Mr. J. B. LAWSON reports good results from this in the *Glasgow Med. Jour.*

For Dyspepsia with Constipation and Piles.

R̄. Tinct. nucis vom., $\bar{3}$ j.; podophyllin, gr. j. Triturate thoroughly to dissolve. Sig. Five drops to be taken in water before each meal. Appetite will improve and stool become natural in a few days.

Constipation with Irritable Stomach.

In irritable stomach complicating constipation, Prof. DA COSTA ordered, at the clinic, oleum ricini floated on ice water, and said it would be retained.

Constipation with Portal Obstruction.

Dr. H. C. TURNER, of Brooklyn, says that he finds nothing so useful after the usual dose of calomel given in these cases as nux vomica given in twenty-five drop doses morning and night. He claims this treatment is much more useful than to repeat the calomel.

DISEASES OF RESPIRATORY ORGANS.

The Treatment of Phthisis by Iodoform.

Dr. DRESCHFELD has continued his observations since his first communication. (*British Med. Journal.*) The favorable opinion then formed has been further strengthened by the results obtained. Of sixty-four cases of confirmed phthisis, more or less advanced, and concerning, to a great extent, our patients at the Manchester Infirmary, thirty-four cases only had been under treatment sufficiently long to be available for the purposes of this communication. Of these thirty-four cases, four were in so far advanced a condition that

the iodoform was only borne in the form of inhalation, but gave no results. Two cases were complicated with amyloid disease, and here also the iodoform was useless. Of the remaining twenty-eight cases, ten showed either no improvement or only a temporary improvement (increase of weight, improvement of appetite, decrease of cough and expectoration); while the physical symptoms showed no alteration at first, but afterwards the phthisical process gradually advanced, and associated again with loss of flesh, night sweats, etc. Of the remaining eighteen cases, some showed slight but steady improvement, broken only temporarily by a fresh cold or some complication, such as gastric catarrh, pleurisy, etc.; while in six cases the improvement was most marked and beyond all expectation, the increase in weight amounting in one case to fourteen pounds, in another to ten pounds, and in a third to eight pounds, in one month. The physical symptoms also improved; the sputa, however, continued to contain tubercle bacilli. The iodoform treatment was also tried in six cases of incipient phthisis. Of these, two had only been under treatment a very short time. Of the four remaining cases, two showed no improvement; one was at once benefited, cough and expectoration entirely ceased, the apex catarrh disappeared, and the patient felt now perfectly well. In the second case (reported in the *British Medical Journal*), the treatment was equally successful—only, however, after having been continued for a longer time. There being an almost entire cessation of cough, it was difficult to obtain any sputa; one specimen, however, was obtained, and this was found free from bacilli, while before they were found abundantly. Two cases of laryngeal phthisis, treated both internally and by

inhalation, and also locally by the application of iodoform powder to the ulcers, gave satisfactory results; the ulcers cleared and became smaller, and the general condition improved. The iodoform was given in the form of pills (one grain of iodoform, two grain of croton chloral, one minim of creasote); and in the form of inhalation (twenty grains of iodoform, twenty minims of oil of eucalyptus or ten minims of creasote, and half an ounce each of rectified spirit and of ether). The inhaler used was one devised by Dr. W. Roberts, consisting simply of horse-hair matting, to the inner side of which was attached some flannel or cotton-wool; and on this the inhalation mixture was dropped. The cost of the inhaler was about three pence. Where the pills were badly borne (especially in women) the iodoform was added to cod-liver oil. In very young children, iodoform inunction, made with olive oil or vaseline, was to be recommended; while older children seemed to take iodoform, either as powders or in small pills, very well. The good effects of iodoform seemed to consist in the following: 1, Increase of weight; 2, increase of appetite; 3, diminution of cough and expectoration; 4, diminution or even total cessation of night-sweats; 5, the temperature was often a little lowered. No symptoms of iodoform intoxication had ever been seen. Several medical men who had tried the iodoform treatment had also obtained very satisfactory results.—*Can. Med. Record.*

On the Treatment of Hay Fever and Allied Disorders.

In a very valuable paper on this subject in the *American Journal of the Medical Sciences* Dr. HARRISON ALLEN claims that the means of effecting the

cure of this hitherto considered incurable disease is simply to overcome the tendency to obstruction in the nasal chambers.

The symptoms of hay fever are always associated with some degree of obstruction of one or both nasal chambers. A cause of this obstruction is dilatation of the blood-vessels. There is no doubt that the local phenomena are in most instances the same, and that the multiform related symptoms, such as injection of the eye, headache, malaise, asthma, etc., are due to reflex vasomotor disturbances. But many patients report for treatment who exhibit swelling of the nasal mucous membrane, occlusion of the respiratory passages, and mucoid or semi-purulent discharge, without any of the related reflex phenomena. Yet a third and intermediate group exhibit perhaps a tendency to turgescence of the mucous membrane, together with one or more of the more common constitutional symptoms of typical hay fever. Indeed, there is nothing peculiar to the disease just named save its sharply defined periodicity, particularly in that phase of it where the periods of recurrence happen to coincide with the time of fruitage of certain plants, or the gathering of certain crops. In a small group of cases, where, in addition, other signs and symptoms become prominent which would invalidate the above proposition, Dr. Allen is inclined to attribute them to mental impression—in some of the varied phases of hysterical or neurotic excitement.

Or the case may be stated in different language, as follows: In an imperfectly defined group of cases of nasal catarrh, a sensation of sudden obstruction of one or both nasal chambers is a conspicuous symptom. This sensation is accompanied by a constant change in the chambers themselves, viz., en-

gorgement of the membranes over the turbinated bones, producing pressure against the septum and occlusion of the respiratory passages of the nose. The sensations are recurrent, but vary greatly as to the time of the day or the season of their return. With some patients they are nocturnal, and are associated with the recumbent position; with others they occur after meals only; with some they occur in the summer season; with others, yet again, in the winter. The sensations may be confined to either chamber, or be present in both. In aggravated cases they are associated with numerous reflex symptoms, among which may be mentioned lachrymation and hyperesthesia of the conjunctiva, headache, and asthma. Patients having a disposition to obstruction during the summer and autumn report themselves as suffering from "hay fever;" while those having alternating attacks in the right and left chambers report with "nasal catarrh."

The cases so far studied exhibit one feature in common, viz., that the inferior turbinated bones lie well above the plane of the floor of the nasal vestibule. In many persons, not the subjects of "hay fever" and allied disorders, the lower free portion, including, of course, the inferior border of the bone, lies below the plane of the floor of the nasal vestibule; and in ordinary inspection the inferior meatus is out of sight. It will thus be seen that the mucous membrane, which is known to be the most erectile, is also the most exposed to irritation from extraneous substances, and to changes in the temperature of the surrounding air.

The conclusions to be drawn from the study of the six cases reported by Dr. Allen may be summarized briefly as follows:

1. That the treatment of all conditions

of obstruction in the nasal chambers, no matter from what cause arising, can be successfully carried out by destroying the causes of obstruction. If the cause be an over-growth of bone-tissue, it must be filed, sawed, or drilled away. If it be caused by a deviated cartilaginous portion of the septum, such portion must be re-set in a new place. If, as is often the case, it is due to periodic turgescence of the mucous membrane or the resulting secondary hypertrophies, such growths must be destroyed, either by the galvano-cautery, by the snare, or by caustic acids.

2. That the treatment of hay fever and allied periodically recurring nasal affections in no way differs from the treatment of other nasal diseases accompanied by obstruction, and that the treatment may be conducted during an attack as well as in the intervals between any two attacks.—*Louisville Med. News.*

Quebracho in Dyspnœa.

EL SENTIDO CATOL, *en las Ciencias Med.*, claims that "1. Quebracho diminishes the frequency of the respirations and cardiac contractions. 2. It strengthens and regulates cardiac contractions, either directly or through the nervous system. 3. This action is evident and immediate. 4. It has a manifest anti-dyspnœic action. 5. In nervous dyspnœas it must be tried in a greater number of cases. 6. It produces the same effect in dyspnœa from acute pulmonary affections. 7. Its prolonged administration produces no alteration in other organs or functions.—*Gaillard's Med. Jour.*

CONSTITUTIONAL DISEASES.

Physiological Properties of Maltose.

In a note to the Paris Academy of Science, M. BOURQUELOT (*Gazette hebdomadaire de médecine et de chirurgie*) refers to a previous paper in which he had insisted on the alimentary importance of maltose—the sugar which, it is known, is formed in large quantities in the digestion of amylaceous substances and had made the provisional supposition that this sugar was directly assimilable. But this hypothesis, resting solely on the resistance of maltose to the digestive ferments of certain animals, and on the fact of its fermentation in the presence of yeast of beer, was not sufficiently justified. M. Bourquelot has therefore been continuing his investigations to determine whether it is borne out by the manner in which maltose comports itself in the system, or whether, as is granted in the case of cane sugar, it is entirely transformed into glucose before passing into the blood. Although, as regards the diastase of malt and of the saliva, it has been asserted, contrary to the conclusions of Brown and Heron, that the prolonged action of these ferments causes the transformation of a certain proportion of maltose into glucose, the question arises, whether, in the absence of all germs, these ferments really cause this transformation. Two-per-cent. solutions of pure maltose, added to diastase in solution or in saliva, previously filtered by means of the apparatus of Klebs and Tiegel, were kept at temperatures of 15° and 38° C. (the latter being slightly above the normal temperature of the body). No change was observed in the saccharine matter, even at the end of twenty-four hours, nor was there any separation of it if the experiments

were conducted in the presence of carbonic acid. Invert sugar, as has been shown by Méring, has no action on maltose; but, although neither the diastase of the pancreas nor the invert sugar of the intestinal juice has, singly and alone, any action on maltose, it was necessary to determine whether, as they are mixed in the intestine, they may not transform it. Experiments showed that such was not the case. Furthermore, maltose resists artificial gastric juice, and even the pancreatic juice obtained by macerating the gland in water, unless the action is prolonged for more than six hours. If the experiment is continued longer, small quantities of glucose are formed. However, the liquid becomes filled with bacteria, a complication that cannot well be prevented, as pancreatic juice will not bear filtration through porous earth. Intestinal juice, even more than pancreatic juice, becomes filled with bacteria rapidly. Collecting after a time in a flocculent mass, they fall to the bottom of the vessel. These microscopic organisms, if not a cause of error, are at least a cause of doubt as respects the conclusions to be drawn from the results obtained. When the intestinal fluids are not filtered, they transform maltose and saccharose, sometimes in part, sometimes entirely. These results are in accord with Brown and Heron's. When, however, the intestinal fluids are filtered with Kleb's apparatus, in most cases there is no transformation, either of maltose or of saccharose. Rarely, traces of glucose may be discovered. Nevertheless, in the case of maltose, the change of any part of it into glucose may be attributed to errors of manipulation.

It is interesting to know whether the acids that are formed in the stomach are able to transform maltose, under the conditions in which they act in

physiological digestion. A one-per-cent. solution of maltose, added to a twenty-per-cent. solution of hydrochloric acid, at a temperature of 38°C ., was unchanged after a period of thirty-six hours. Lactic acid, under like circumstances, failed to produce any change in maltose. On the contrary, when saccharose was subjected in the same way to the action of hydrochloric acid, seventy per cent. of it was transformed at the end of six hours, and ninety per cent. at the end of twelve hours. In the presence of lactic acid, saccharose to the extent of thirty-three per cent. was changed in thirty-six hours.

In view of these facts, M. Bourquelot concludes that it is not easy to maintain that saccharose is converted solely in the small intestine, and not to admit that the hydrochloric and lactic acids in the stomach may be important factors in its digestion.—*N. Y. Med. Jour.*

The Best Time for Administering Medicines?

Before or after meals? Such is the question often asked of the doctor, but the answer is not always ready. The *Midland Medical Miscellany* answers it as follows: Medicines that are irritating should be given after meals, when the stomach is full, viz.: the salts of copper, zinc, iron and arsenic, in large doses. Small doses, intended to act on the stomach terminals of the vagi, must be given when the organ is empty. Chemical reasons also have their influence, thus, oxide and nitrate of silver, intended for local action, should appear in the stomach during its period of inactivity, lest, at other times, chemical reactions destroy the special attributes for which these remedies are prescribed. Iodine and the iodides further illustrate this point. Given on an empty stomach

they promptly diffuse into the blood, but if digestion is going on, the acids and starch form products of inferior activity, and thus the purpose which they were intended to subserve is defeated. Substances prescribed to have alvinel action on the mucuous membrane, or for prompt diffusion unaltered, are preferably given before meals. The condition of the stomach veins after meals is such as to lessen the activity of diffusion of poisons, and hinders their passage through the liver. It follows that active medicaments in doses near the danger-line, are more safely administered after meals.

When shall acids and alkalies be given, before or after meals? First, as to acids. When acids are prescribed with the view to check the excessive formation of the acids of the gastric juice, they may be given before meals—as, by the laws of osmosis, they will determine the glandular flow of the alkaline constituents of the blood. The same reasoning would hold good when the alkaline condition of the blood is in excess; osmosis being favored, the acid would reach the blood more readily. Second, as to alkalies. These may be given just before meals, when the acid forming materials in the blood diffuse into the stomach glands, and after digestion is completed, when the alkalies diffuse directly into the blood, without interference from the contents of the stomach. An alkali taken during the time when the reaction of the stomach juices should be strongly acid, must necessarily hinder, if not arrest, the digestive process for the time being. The metallic salts—notably corrosive sublimate, alcohol, tannin, and some other agents—impair or destroy the ferment, or digestive power, of pepsin. Wine that is intended to act as a food, is most beneficial when taken slowly

during the course of the meal. The objection as regards the ill effect of alcohol on pepsin, is not applicable here, except to the stronger spirituous wines in large quantities, for the ordinary medicinal wines do not have sufficient alcoholic strength to injure this ferment. Iron, phosphates, cod liver oil, malt and similar agents should, as a rule, go with food through the digestive process, and with the products of digestion enter the blood.—*Med. Age.*

Papaine (Vegetable Pepsin).

Dr. BERTHAUD advocates (*L'Union Médicale*), a vegetable substance called "papaine" as a substitute for pepsin. Papaine is a milky juice extracted from the trunk and green fruit of the *Caraca papaya*. This valuable tree is indigenous, according to some, to South America; according to others, to the Spice Islands. It is found in India, in the Mauritius Island, in the Antilles, and in South America. The juice which exudes from the green fruit of the papaya, and even the seeds of this tree, possess valuable vermifuge properties. But the tree is chiefly interesting from the fact that the juice obtained from its fruit, leaves and trunk contains a considerable proportion of a principle analogous to animal pepsin, to which M. Wurz and M. Bouchut have applied the name "vegetable pepsin." This juice exercises a marked action on muscular fiber, causing its speedy softening and digestion. Even the emanations from the tree are sufficient to produce this singular action on meat. In the countries where the papaya is cultivated the inhabitants suspend in the high branches the meats which they wish to make tender. It is therefore not strange that the idea should arise of making the papaya juice subserve some practical

use to mankind. Experiments have yielded the most satisfactory results. M. Wurz, in a report to the Paris Academy of Sciences, in November, 1880, stated that papaine had dissolved a thousand times its own weight of fibrin, acting with as much rapidity and regularity as animal pepsin. It has been tested clinically as well as in the laboratory, and abundant evidence has been afforded that its action is certain and constant. Its general use would, therefore, prove more satisfactory than that of animal pepsin, much of which, as it is now found in commerce, is comparatively worthless from adulterations. Moreover, according to M. Wurz and M. Bouchut, all nitrogenous foods—milk, flesh, fibrin—are digested in much larger quantity by papaya juice than by pepsin secreted by the stomach; furthermore, the vegetable ferment possesses this great advantage over the animal ferment, that it acts equally well whether in acid, neutral, or alkaline solutions.

Papaine is indicated in cases of gastralgia, gastritis, dyspepsia, and all affections characterized by perverted functional action of the stomach. In all such cases it is (according to the opinion of Dr. Berthaud) a much more valuable remedy than animal pepsin.—*Ibid.*

Non-Vesicating Croton-Oil.

An important discovery seems to have been made by Mr. HAROLD SENIER, of the London Chemical Society, to judge from an abstract given in a recent number of the *Lancet* of a paper read by him at a meeting of the Pharmaceutical Society. It amounts to nothing less than that croton-oil may be separated into two different oils by the action of alcohol, one of which is irritating but not purgative, and the other

purgative but not irritating. When alcohol of the specific gravity of 0.794 to 0.800 is added to croton-oil in the proportion of seven or more volumes to six, the oil separates into two parts—one of them (the vesicating oil) dissolves in the alcohol, and remains soluble in alcohol in all proportions; the other (the purgative oil) separates, and is then found to have become insoluble in any proportion of alcohol. This insoluble oil is said to be a safe and pleasant purgative, free from any undesirable action, in doses of one-tenth to one-half a minim, in the form of pills made with magnesium carbonate and extract of henbane as excipients.—*N. Y. Med. Jour.*

Advice to the Medical Witness.

The *Transactions of the Oregon State Medical Society*, contains an able paper on Forensic Medicine by the President, Dr. C. C. STRONG, of Portland, Oregon, from which we condense the following good advice. The writer insists first upon the most thorough preparation; that the study of the case should be as complete as possible, as every opposing lawyer has "crammed" for the occasion, and will not fail to take advantage of the slightest slip in the testimony of the witness. It places a medical man in a very unpleasant position who comes into court from a half-performed post mortem examination, satisfied because he has detected disease of the heart sufficient to cause death, if he is questioned whether or not there was fracture of the skull; and if subsequent examination or testimony reveals that condition, of which he was ignorant, he loses professional standing which can never be recovered. Completeness of preparation is necessary in all matters affecting public interest, not only for the

advancement of justice, but for the vindication of the witness. As an athlete, when called upon to perform some feat of physical strength, prepares his body for the task, so should the physician cultivate his intellectual power when notified of the probability of his being questioned publicly by a lawyer.

Let the preparation be methodical, and if possible, chronologically arrange the facts in the case. Be careful to refresh the memory just before the trial as regards places, dates, names and times; and when possible, in naming a particular day, in the course of the testimony, it is well to give the reasons which impressed it upon the mind.

Consider carefully beforehand size, weight, distances, when these are involved, using invariably their old English standards in mentioning them; and where proximate measure only is required be sure and refer to well known articles. There is nothing impressive, but the contrary, in referring to some professional standard generally unknown to the laity, unless it is necessary to make the testimony clear. If the witness is able to make some kind of a sketch showing the relation of a body, or portion of one, to its surroundings, his words can be much more plainly and definitely understood—but the sketch must be absolutely accurate.

As an expert the physician will frequently be called upon for his opinion, and as his conclusions are to be deduced from proven facts, they must be carefully drawn to possess any value. To perform this duty thoroughly he should therefore not wait until in the witness box. Tidy's advice may well apply at this point. He says: "And if in the quiet of your study you fail to come to a satisfactory conclusion, do not attempt a wild conjecture in the hurry and excitement of the witness box."

To *be* accurate is ten thousand times better than to *appear* brilliant."

The physician should carefully study the opinions held and expressed by others, and be able to give good definite reasons why he adopts some and rejects others, always remembering that he will be exposed to the scathing fire of cross-examination.

He should bear in mind the difference between a fact and an opinion, so that there may be no confusion in his mind regarding their identity. For example, it is a fact that certain drugs are deadly poisons; but their action in producing certain effects is an opinion. The direction, size and character of a wound are facts. Deductions drawn as to the manner in which the wound was produced, or for what purpose, is, in most cases, a matter of opinion. An opinion, however, is always based on facts, and either a personal knowledge of the circumstances relating to these facts, or knowledge gained from undisputed authority concerning them, is essential. No tolerance can be given to hearsay or rumor.

A bias statement given by a witness is invariably detected, and an attempt of the witness to arrogate to himself any of the duties of the jury, injures the value of his evidence.

The plainest English possible should be employed, and any tendency to exaggeration suppressed. Be sure before answering that the entire question is thoroughly understood, and the question alone asked should be answered without ambiguity or useless expressions. All "ifs" and "thats" should be omitted if possible, and the answers should convey real meaning in such clear, unmistakable language that there can be no misunderstanding.

If no distinct opinion on a certain subject has been formed, there should be no hesitation in saying so; and the

physician should never allow himself to be drawn into, or give, an opinion formed on the spur of the moment, in the witness box.

As nearly as possible the exact language of conversations testified to, or authorities quoted, should be given.

When the close pressure of cross-examination occurs, the only safety of the witness is in coolness, self-possession, and a thorough knowledge of the case. If he lose his temper, he is sure to be led on until he irretrievably damages himself, his testimony, or his medical reputation.

Admitted ignorance of a question not understood is not only not condemnatory, but praiseworthy; and within certain limits the answer "I do not know," is both safe and honorable.

A witness may be obliged to answer yes or no in a given case; but, though he may not modify it, he has a right to explain his answer to make it comprehensible; and he should always avail himself of that privilege, to prevent any chance of a misunderstanding of his meaning. All facts should be given as the witness understands them, without reference as to their effect, and in opinions drawn from facts if any honest doubts arise, they should be plainly stated.

The witness should never allow himself to be drawn into a discussion; but having given an opinion, and the reason for it, let it rest there. He is entitled to have the question fairly and clearly stated to him, and the utmost care is required that the conditions of a hypothetical case should be plainly discerned and properly understood by him before answering. If the hypothetical contain impossibilities, or inconsistencies, he should never endeavor to give a mixed answer, but insist that a proper case be given him.

One of the most important points of all to be remembered is, that the opposing attorney will probably attempt to impair the value of important testimony given by the medical witness, by showing lack of professional knowledge, and will propound questions which are incapable of definite answers, because of differences of opinion among high medical and legal authorities. The only manner by which such an attack can be met, is to enter the court room prepared to state the existence of such differences, when they exist, and as they will probably relate either in a direct or remote manner to the subject of trial, the simple form of preparation is that recommended by Tidy, namely, get the case well up in your office before the trial.—*Va. Med. Mo.*

Sequelæ of Diphtheria.

The sequelæ of diphtheria, as we know, are oftentimes more serious than the disease itself, and Dr. ALFRED CARPENTER endeavors to explain their occurrence (*Brit. Med. Jour.*), by the following ingenious theory :

"But how will this explain the sequelæ which frequently follow upon diphtheritic mischief? I mentioned the fact that potato-rot is known to be propagated by the agency of resting spores. These are spores or germs which are shut up in a very resistant envelope, which enables them to retain their vitality in adverse circumstances; so that heat, if it be not much above 212° , and the cold even of zero, will fail to destroy it. These spores may, by analogy, be fairly assumed to exist. The ordinary spores are evacuated from the system as the patient recovers; but the resting spores remain in contact with the lining membrane of the blood-vessels, or are carried by the blood-current into

some of those parts of the body which usually act as filters, and retain matters which are foreign to the blood-current. Perhaps they attach themselves to lining membranes, such as the valves of the heart. They may there, as they develop, set up ulcerative endocarditis; and, being detached from the valves as they increase in size, they irritate the membrane; and, being carried on by the blood-current, they produce emboli at the spot to which they are carried. There they multiply sooner or later, and the sequences of the disease appear as if they were separate and independent diseases, and as such are often registered among the causes of death as totally independent of the preceding diphtheritic condition."

Of treatment, he says :

"That treatment has been the use of ammonia as the proper stimulant, so as to reduce the acidity of the blood; for I have generally found these cases in constitutions which are either rheumatic with the lactic acid diathesis, or gouty from the excess of lithic acid in the constitution. I have generally given alkalies, as lithia, or potass. in combination with it; and when there has been an elevated temperature, which has indicated excessive chemical action in the invaded part, I have given the sulpho-carbolate of soda, with the greatest possible benefit. This salt reduces temperature, most likely by its antiparasitic power; for as soon as a few doses have been given the fever subsides, and the patient is much relieved; but if the medicine be left off too soon, there is certain to be a relapse. This is very disappointing, and, if the practitioner be disheartened, and try another remedy, his patient will probably die. But if he return to his sulpho-carbolate, he will ultimately destroy all the developing resting spores in the tissues of his pa-

tient, and lead him on to a perfect recovery. It is curious how, in these cases, organ after organ becomes involved in the disease; it is also curious, but highly satisfactory, that the congestions or embolisms follow one another in point of time, otherwise there would be very little chance for the patient to recover. I would urge the practitioner to continue the sulpho-carbolate, in small doses, first with the ammonia, and, after a time, with quinine, avoiding altogether the mineral acids, as such appear to allow a more rapid development of the resting spores and a further relapse.

"As regards the local treatment of diphtheria, I have been accustomed to treat it on scientific principles, and attack the disease just as my gardner attacks the oidium upon grapes, and other parasitic diseases upon vegetables generally. I apply the powder of washed sulphur to the throat very frequently, blowing it into the fauces, and applying it by means of a brush with a little glycerine or honey, alternating the application with a little sulphurous acid in solution. It is not a painful application; it destroys the mycelium and the ordinary spores which produce the disease. If this be done quickly, so that the growths do not penetrate to the deeper tissues, no resting spores will find admission to the body, and there will be no following sequelæ. I have also been accustomed to advise that creasote be kept in the room, so that the air may be placed in that condition which diminishes, if it do not destroy, the growth and development of hyphomycetous fungi."—*Med. & Surg. Reporter*.

Bichloride of Mercury in Diphtheria.

If diphtheria is due to a germ, and if corrosive sublimate possesses the germi-

cide properties that Koch ascribes to it, we can understand why Dr. MADISON REECE (*Jour. Am. Med. Ass.*), has had good results from this drug. His method of preparing this medicine is to dissolve one grain of the bichloride in four ounces of rain-water; then, if the patient is old enough to gargle and rinse the throat and mouth, he is to do so every two hours, and immediately afterwards to take a teaspoonful internally. If the disease be of a severe form, it should be administered in this way every hour. The above dose is calculated for a child of five years of age. It should be continued in smaller and less frequent doses for a week or longer.—*Ibid*.

Diphtheria.

Dr. GABRIEL, of France, claims that vomiting, when it occurs at the beginning of an attack of diphtheria, must always be regarded as a grave symptom; that he noted it twenty-six out of ninety-five times, and that the whole twenty-six where the diphtheria was thus ushered in died. He further states the vomiting was absent in the mild cases.—*Weekly Med. Review*.

Diphtheria in Vienna.

At the meeting of the Society of Physicians, Vienna, Professor Carl v. Braun, presiding, Professor Ludwig read a paper written by Dr. GEORGE PAPASSIS, of Athens, in which was described *the most specific of all methods of treating diphtheria*. Of forty-two cases treated by this method only three died. It consisted in the internal administration of the following: \mathcal{R} . Liquor ammonii causticii, \mathfrak{m} x. to xij.; aquæ destillat., \mathfrak{z} ijss.; syrup, \mathfrak{z} ss.; potass. chlorat., gr. xij. to xvj. A dessert-spoonful every hour. Food, stimu-

lants, and, if necessary, an emetic are added. Externally the throat is touched with liquor ammonii causticii, pure or diluted with water.—*N. Y. Med. Jour.*

Diphtheria.

The use of oleum terebenthinæ rectificatum has been highly extolled (*Cincinnati Lancet and Clinic*) by some German writers, in the early stages of diphtheria. It is said to act with great promptness, often dispelling every trace of the disease in twenty-four hours. The dose, which should be given in warm milk, is from a teaspoonful for children to a tablespoonful for adults, night and morning.

Topical Cardiac Blistering in the Treatment of Acute Rheumatism.

Dr. NEIL O'DONNELL PARKS recently told the Rhode Island Medical Society (*Med. News*), that he had employed this mode of treatment in seven cases, and in one of them no other measures whatever were used; the result being in this, as in the other cases, a prompt and complete cure. In the remaining cases, salicyne, or one of its allied compounds, and ammonium carbonate, were given internally. Oleum gaultheriæ was used in some instances—internally in doses of fifteen drops once in two hours, and applied locally to the inflamed joints, combined with an equal amount of lin. camphoræ comp. The series described included cases of acute articular rheumatism, and rheumatic gout, so-called. In some of the cases an endocardial murmur was present. Usually, one blistering sufficed, but in case of relapse it was repeated. The writer expressed his belief that we have, in the matter under consideration, the most valuable adjunct to our means of successfully treating rheumatism.

Formula for Salicylic Acid and Tonga in Rheumatism and Rheumatic Neuralgia.

Dr. C. H. HUGHES (*Weekly Med. Review*): After reaching a satisfactory diagnosis, and determining the remedies to be employed, the next essential is to determine upon acceptable and agreeable combinations and this, if the remedies are essentially disagreeable, becomes often of paramount importance in the successful management of certain cases.

Salicylic acid is peculiarly irritating to the throat and stomach, and no amount of simple aqueous dilution suffices to diminish the irritative effect.

The best single corrective of the irritant property of salicylic acid is acetate of potash, in quantities of two grains to each grain of the acid, dissolved in syrup. Allied to this is the liquor ammonia acetis, in the quantity of one dram of the liquor to five grains of the acid.

Any desired combination of the above may be made, and twelve minims of the fluid extract of tonga added to each dram of solution. The following formula will illustrate:

No. 1. \mathcal{R} . Acid salycil., \mathfrak{z} ii.; potas. acetati, \mathfrak{z} iv.; syr. limonis, \mathfrak{z} i.; ext. tongæ fld., \mathfrak{z} iv.; aq. menth. pip., \mathfrak{z} i.; aq. anisi, q. s. ft. \mathfrak{z} iii. M. S.—Two teaspoonfuls every two hours till relieved, or until four or five doses are taken. After that give at longer intervals. Give with water.

The minderiri spirits may be added to the above, ounce for ounce, and tablespoonful doses given with good effect, if fever or prostration accompany the neuralgia or rheumatism, or if the rheumatism be what is called inflammatory with associated neuralgia.

Lime juice or lemon juice may be added with advantage to the mixture, or the quantity of the lemon juice may

be increased till the mixture is made palatable.

The following modification of the above formula has been suggested by a leading druggist of this city, but the liquorice is to some people objectionable.

The salicylate of soda may be used in all of these mixtures. The salicylic acid is given because it is more irritant and therapeutically more potent. Formulæ for eight ounces :

No. 1. \mathcal{R} . Acidi salycilic, \mathfrak{z} v. \mathfrak{D} i.; F. E. tonga, \mathfrak{z} ii.; syr. rosa. gall., \mathfrak{z} i.; liq. ammon. acet. ad., \mathfrak{z} viii. M. ft. sol.

No. 2. \mathcal{R} . Acidi salycilic, \mathfrak{z} v. \mathfrak{D} i.; curaco cord.; syr. tolutan. $\mathfrak{a}\mathfrak{a}$, \mathfrak{z} i.; ess. vanilla, gtt. xx.; liq. ammon. acet. ad., \mathfrak{z} viii. M. ft. sol.

No. 3. \mathcal{R} . Acidi salycilic, \mathfrak{z} v. \mathfrak{D} i.; ext. glycerrhizæ fld., \mathfrak{z} ii.; liq. ammon. acet. ad., \mathfrak{z} viii. M. ft. sol.

Muscular Rheumatism.

At the Southern Dispensary and Hospital of Brooklyn the homœopathic tincture of rhus tox. in quarter-drop doses, given every hour, has been found very efficacious in this malady.

St. John Long's Liniment.

This old-time remedy is still in use at the Pennsylvania Hospital, in this city, for stiff and rheumatic joints, and in general for cases in which a local stimulant and rubefacient effect is desired. Mr. JACOB HECKER, Ph. G., the apothecary of the institution, uses the following formula : \mathcal{R} . Vitelli ovi, no., viij.; olei terebinthinæ, \mathfrak{f} \mathfrak{z} xxiv.; acidi acetici, \mathfrak{f} \mathfrak{z} xvj.; aquæ, \mathfrak{f} \mathfrak{z} xxiv. M. The directions for its preparation are as follows : To the yolks, in a gallon bottle, add a small quantity of the

water, and shake briskly together; then add the turpentine in successive portions, shaking the mixture briskly after each addition; then add the acetic acid, and lastly the water, in the same manner. For private practice the liniment is greatly improved by the addition of one drachm of good oil of lemon to each pint.—*Med. Times*.

The Milk of the Bitch.

Dr. BIARCHI (*La Union de las Ciencias Medicas* of Carthagena) says that it is much richer in nutritive materials and in sulphate of lime than the milk of other animals. He therefore wisely concludes that if we can procure it in sufficient quantity, it will prove valuable in rickets and tuberculosis. He has had excellent results from its use.—*Med. & Surg. Reporter*.

An Apparatus for the Inhalation of Corrosive Sublimate in Phthisis.

Dr. E. P. BREWER, of Norwich, Conn., sends us the description of an apparatus which he has devised for applying corrosive sublimate (the most potent destroyer of the bacillus) in phthisis. He uses oxygen as a medium for carrying this drug into the lungs. This apparatus consists of a tank holding one hundred and twenty gallons of oxygen at a pressure of one hundred and twenty-five pounds per square inch; a wash-bottle and a drying bottle, such as are ordinarily used for washing and drying gases. Finally a metal receptacle holding eight ounces and heated by a lamp. In this receptacle is placed a solution of corrosive sublimate 1 to 800 or 1,000, and heated. The oxygen passes through the washing and drying bottles, then through the hot and partially vaporized solution of corrosive sublimate. It then passes out through a rubber tube and is

inhaled. Dr. Brewer is not yet prepared to report upon the practical results achieved by the use of his apparatus.—*N. E. Med. Monthly.*

The Inoculation of Tubercle.

The weight of evidence seems to be in favor of the doctrine that tuberculosis is inoculable, provided the soil upon which it is deposited is suitable. This teaching gains additional strength from the case reported in the *Deutsch. Med. Woch.*, by Dr. MOSLER. Ten days after the first appearance of cough, in a patient who would not eject, but always swallowed his sputa, diarrhœa and severe colic supervened, which proved fatal in eight days. The autopsy revealed tubercles in the lung and intestines. A recent attack of typhoid fever had, most likely, left the intestines weak.—*Med. & Surg. Reporter.*

Cauterization of the Lung.

"There certainly seems need of further experimentation upon animals before the human lung shall be considered a legitimate field for the exploits of the surgeon. And these experiments should be genuine efforts to relieve diseased conditions. Because a healthy dog will survive the removal of a part or the whole of one lung, it by no means follows that a like result is to be anticipated in the case of a man whose lungs are infiltrated with tubercles, and whose vital power is already greatly reduced. When it is found that an animal with tuberculosis can be cured, or even greatly benefited by the cauterization or exsection of the diseased pulmonary tissue, it will then be time enough to make cautious attempts in the same direction upon the lungs of the human subject."—*Med. Record.*

DISEASES OF THE NERVOUS SYSTEM.

A Case of Chorea Treated with Jamaica Dogwood.

Dr. C. H. WOODCOX : I was called to see Miss Maggie Thompson, of this city, age eleven years, of a nervo-billious temperament. The affection proved to be a case of St. Vitus dance. When called, the case had grown so bad that it was found almost impossible to keep the child upon the bed, even with the assistance of two or three at the bedside, there being such a violent involuntary motion of the entire body. At this time she had been confined to her bed about six weeks. Seeing there had been no benefit obtained from the former treatments conducted by reliable physicians, I was somewhat puzzled to know what to do, but after making a thorough examination and finding a temperature at 98–8° as best I could get in axilla, and pulse varying from 80 to 84, with coated tongue and foul breath, I determined "to work upon the secretions" as though there had never been any former treatment. There being a loaded condition of the urine and a dormant state of bowels, I prescribed acetate potash ʒ iij, water ʒ iv, of which I gave a teaspoonful every two hours until the urine was cleared up. At the same time I gave an "alterative powder composed of leptandrin grs. xv., podophilin, grs. viij.; capsicum, grs. ij; mix and make twelve powders; gave one every four hours. To keep my patient quiet I gave a mixture of chloral hydrate, ʒ ij.; bromide potash, ʒ ij; in simple elixir, ʒ ij, of which take a teaspoonful. This treatment I continued for one week, when I found my patient's system in a very good condition. I then prescribed pyrophosphate of iron, ʒ i.; in simple elixir, ʒ ij.; of which I ordered a teaspoonful

before meals three times a day. Also Fowler's solution, $\bar{3}$ i.; simple elixir, $\bar{3}$ ij.; of which a teaspoonful one hour after meals was ordered. Continued chloral and bromide as above. I kept my patient upon this treatment for 12 days without very much improvement. At this point I began to look around a little, for I well knew that I must begin to skirmish. After looking over the many remedies indicated in this case, I concluded to try the Jamaica dogwood. This, to my great amazement I found to give prompt relief. My patient, when I commenced its use, was still in bed and the symptoms not much better. Involuntary motion was almost constant. I prescribed $\bar{3}$ ss. of the Jamaica dogwood three times a day after meals, the last dose at bed-time. I at once omitted the hydrate chloral and bromide. The drug was commenced Dec. 28, 1883. I called to see my patient on the 30th (48 hours later) and to my greatest satisfaction I found her quietly lying in bed and to all appearance resting without the least symptom of narcotism present. I unhesitatingly followed up with the Jamaica dogwood. At the end of eight days from the commencing of medicine my patient could stand upon her feet, dress herself without the assistance of any one, could walk across the floor and had begun to feed herself. Twelve days later I visited her and pronounced her cured. Discontinued Jamaica dogwood and put her upon a mild preparation of syrup of phosphorous as a restorative.—*Therapeutic Gazette*.

Practical Note on the Management of Chorea.

Dr. C. H. HUGHES (*Weekly Med. Review*). In the management of chorea it is essential to make a prompt and

thorough cure of the first attack, if possible, for while benignant nature often supplies an efficient therapy for this disease, she more often fails, and violent cases may die or pass on to choreaic insanity, and the less violent in the beginning, may, without medical interference, become paralytic or a chronic habit, and if recovery does eventually take place, a latent diathetic condition of the voluntary nerve centers may become a part of the patient's constitution, to reappear whenever subsequent neuratropic conditions exist in the patient. In the management of this affection, therefore, no plan could be more prejudicial to the real welfare of the patient, present or future, than the so-called expectant plan, a most pernicious plan when carried out in many other diseases as well as in chorea, and only justifiable when we are in doubt as to the proper therapeutic measures to be employed.

An essential therapeutic procedure in a large majority of cases promotive of a tendency to recovery, is the removal of the child from home and the unsanitary surroundings (speaking in a neurological sense), under which the morbid condition has been engendered.

The change from usual environment should be agreeably diverting to the patient and calculated to call into exercise the volitional powers while being of such a sanitary character as to be promotive of exalted nutrition, invigorating sleep, mental tranquilization and hæmic enrichment. Pure air, free sunlight, and an agreeable temperature should be sought in making the change.

Despite the theories that have been advanced of the dependence of chorea upon rheumatism, based upon its frequent association with antecedent rheumatic fever and co-existent cardiac bruit, it will be found to often follow after a scarlatina, aggravated measles,

whooping-cough or other cause of depressed vitality, if of sufficient intensity to implicate the stamina of the cerebro-spinal axis in such as possess, in inherent neuropathic tendencies. It is often associated with hysteria and epilepsy. For all the cases put forth by Mr. Hughlings Jackson and Dr. Kirkes to show that the origin of the trouble is rheumatic, other cases can be offered to show the non-existence of previous rheumatism, though rheumatism is markedly if not primarily a disease of the nervous system, as a careful examination of all the facts will show (which it would be out of place here to present), and it should not, therefore, be strange to find rheumatism as one of the links in the chain of nervous phenomena, and that chorea is not unfrequently the neuratrophic substratum, just as the lesion of the trophic nervous system which underlies rheumatism, may give rise, and does sometimes, to the phenomena of chorea.

The essential neuropathic condition of chorea is a neuratrophia and consequent instability of the cerebro-spinal motor area, seldom grave enough to be considered organic, strictly speaking, though in a sense or degree we must concede that all disease is organic, and the post mortem changes that have been found in the corpora striata cortex and elsewhere in the brain, such as erosions hæmorrhages, but in the fatal cases, are sufficient to satisfy us that in many cases the lesion is grossly structured through hyperæmia and irritation of the motor area of the cortex and subjacent portions of the brain and cord are often primarily at fault, and this is obviously due to atonic vaso-motor conditions. Beginning in the motor area of the brain and chord, chorea may, in its progress, and often does, invade the psychical sensory regions, giving rise to imbecile and insane states and anæsthesia.

To treat chorea successfully, therefore, we should suppress, as far as we can, involuntary movement from the very beginning, by giving the child the necessary moral encouragement and strengthening its will-power by surrounding the child with new demands upon its attention and volition as well as by medication. The sympathetic treatment that fosters hysteria is equally objectionable in chorea. The child wants encouragement that it may not yield any more of its control than it is obliged to, in order that it may not become discouraged and give up entirely to the erratic movements. The will should be made to pass even, though ever so imperfectly, over the channels of motor nerve conduction, so that the "insanity of the muscles" may not become complete, pending our efforts at physiological reconstruction.

The medical treatment should be descending cerebro-spinal galvanism and arsenic to restore trophic nerve power and tranquilize the psycho-motor area, chloral hydrate and sodium bromide in moderation, especially at night, to secure complete cerebro-spinal rest and the neurotic and hæmatic tonics, iron, the hypo-phosphates, zinc, cod-liver oil and strychnia, the latter very sparingly. A milk diet is preferable to all other simple substances, but the patient should be fed on a generous variety of food.

After the involuntary tumult of the muscles has subsided the physician should still look after the patient until a reassuring vigor of constitution is established, and such advice should be given as will tend to promote continued growth in new strength and give the best assurance against the return of this singular and sometimes formidable expression of nerve irritability.

If we watch our patients closely we

shall find some of them troubled with symptoms of laryngeal nerve irritation and spasms. When the spasm is not great enough to attract our attention in the day time, we may often learn of its existence from statements made by the patient or nurse in regard to the child's having a troublesome night cough.

I do not know why the cough should appear at night and be absent all day. I have seen it regularly recur at bed time and continue through the night to the great disturbance of the patient's rest.

DISEASES OF THE URINARY ORGANS.

Pepper's Treatment of Chronic Bright's Disease.

Before his class at the University of Pennsylvania, Dr. WILLIAM PEPPER (*Med. Times*), presented a woman suffering from chronic Bright's disease and chronic lung trouble, and made the following remarks on treatment :

"With this pulmonary trouble and emaciation, I should be unwilling to treat her with such a rigid diet as I should resort to if she were in a better state of nutrition, and were not the subject of chronic lung disease. She will receive a light breakfast and supper, consisting of some form of mush, with cream or milk. Her dinner will consist of meat, fish or oysters. Between each meal she will be given a glass of milk ; egg will be avoided. The form of albumen found in eggs has seemed to me to dispose to an increased excretion of albumen. I prefer to this lean, underdone meats and oysters.

"I propose to give her cod-liver oil and bichloride of mercury. Iodide of potassium, which I should gladly give her, occasionally irritates the kidneys. I therefore prefer to use bichloride of

mercury, beginning with a moderate dose and increasing it as the stomach will permit. I shall commence with one-fiftieth of a grain, slowly increasing to one-twentieth of a grain, immediately after meals. The cod-liver oil will be given during the alkaline stage of digestion, an hour and a half after meals. Iodine will be applied over the left chest as frequently as can be done without producing too much irritation of the skin. The action of the skin will be promoted by daily friction and the rubbing of a little oil into the skin."—*Med. & Surg. Reporter*.

The Treatment of Diabetes Mellitus.

Dr. AUSTIN FLINT, JR. He referred to the fact that sugar was occasionally found in the urine of apparently healthy persons. In his experience the proportion has been one in every 377 cases. He next called attention to the different methods of testing for sugar, stating that if a perfectly fresh solution of Fehling's test be employed, there could be no error in the result. He also commended Squibbs' tests. The specific gravity bears no relation to the proportion of sugar. Sugar may be present in urine of a low specific gravity. He had seen it in urine of a sp. gr. of 1010. The quantity of urine need not be increased. He considered the liver to be a sugar-producing organ. In health, this sugar is washed away by the blood as rapidly as it is formed. The sugar contained in the food is normally destroyed in the liver. In regard to prognosis, he said that if the patient would submit to a certain course of treatment as soon as glycosuria was recognized, he thought that it was possible to effect a cure of the disease, or at least, to remove the most characteristic symptoms, with the exception, perhaps, of the occasional

appearance of a small quantity of sugar in the urine as a temporary condition. In the treatment, almost a sole reliance should be placed on the use of a diet from which starches and sugar had been excluded. Systematic daily muscular exercise should be enforced, but fatigue should be scrupulously avoided. All alcoholic excesses and the use of sweet fruits are to be avoided. In cases where the sugar persists, the use of solution arsenite of bromine in doses of three drops every three times a day, is often of service in diminishing the amount of sugar and relieving the distressing symptoms of the affection. This may be continued for weeks or months without unpleasant effects. The rigid diet should be continued for at least two months, even in the mildest cases. The return to ordinary diet should be gradual, and the urine should, during this time, be examined every five or six days. —*Med. Age.*

Barth on the Nervous Accidents of Diabetes Mellitus.

BARTH (*Union Med.*), describes nervous phenomena in diabetes, resembling the results of intoxication by lead, alcohol, etc. They present varying, undefined characteristics.

Motility: Weariness and want of tone, also actual paralysis, usually temporary. Hemiplegia and paraplegia, are much rarer than paralysis of one limb or a single group of muscles. The tongue and the laryngeal muscles may be affected, and the most different compound paralysis are possible. They may disappear, recur, etc. Also ataxy, obstinate cramps, and epileptic attacks may be observed.

Sensibility: Anesthesia of one limb or a limited area. Sensations of pain and touch only are ordinarily affected, frequently there is neuralgia. Hyper-

esthesia (pruritus), paresthesia, increased sensitiveness to cold, the latter probably due to the limited heat producing power of the organism. Very severe, usually bilateral neuralgia resisting all remedies sometimes situated in the nerves of the internal organs.

Special Senses: Loss of sexual desire, cataract, retinitis, atrophy of optic nerves, amblyopia, color blindness, hemiopia, incomplete paralyzes of ocular muscles, deafness, loss of smell.

Trophic Disturbances; Utricularia, partial sweats, symmetrical gangrene, retraction of palmar aponeurosis.

Psychical Symptoms: Apathy, enfeeblement of intellect, somnolency, irritability, sleeplessness, nocturnal delirium, with insane delusions. Diabetes may present symptoms of brain tumor, intense headache, transient aphasia, giddiness, fainting, epileptic and apoplectic attacks. Especially coma is to be noted.

Post mortem examinations show that there is no primary disease of the nervous system. Bouchard's theory approximates most closely to the facts, that the symptoms are due to drying of the tissues, the consequence of hyperglycemia. If the well-drained tissues are suddenly still further deprived of water these symptoms arise; coma frequently succeeds profuse sweating and diarrhœa.

Calcium Sulphide in Diabetes Mellitus.

The variety of drugs that have been recommended for the cure of this very imperfectly understood disease, offers strong presumptive evidence of the inutility of them all. However we must record what seems worthy on the subject. Dr. C. M. Cauldwell (*N. Y. Med. Jour.*), has used calcium sulphide in three cases; in one it produced no effect

whatever, in the others improvement began and recovery took place during the administration of the remedy. The dose is one-quarter to one-half grain three to five times daily. Dr. C. concludes that although calcium sulphide is certainly not a specific in diabetes, yet it seems worthy of a trial in persistent cases of this distressing disease.—*Med. & Surg. Reporter*.

Nux Vomica and the Mineral Acids in the Treatment of Diabetes.

Dr. S. WILKES, of London (*Med. Times & Gaz.*), reports three cases of diabetes treated with the use of nux vomica at Guy's Hospital. In all of them the patients gained in weight, and gave other evidences of improvement, although one of them died suddenly some time after leaving the hospital. Dr. Wilkes remarks upon the beneficial action of these remedies on the digestion, but he thinks that this action is not sufficient to explain the manifest good effect in diabetes. He is persuaded that, over and above their action on the digestive apparatus, they have a positive effect upon the glycogenic function. The three patients whose cases are reported were put upon the use of anti-diabetic diet.

DISEASES OF RESPIRATORY ORGANS.

Catarrh of Larynx.

ARTHUR T. NORTON, F. R. C. S., in *Medical Press and Circular*. One of the most common causes of hoarseness is chronic catarrh of the larynx. The voice in this affection is not invariably hoarse, but becomes so after fatigue or any exposure to wind, damp, or after singing or speaking. Chronic catarrh may be caused by damp atmosphere or

damp residence, or by the overuse of the larynx, or by too powerful use of the larynx, as in clergymen or public speakers, or by the abuse of alcohol, or may be associated with gout. It is extremely common in this country, and is very troublesome to the individual, on account of its effect on the voice and on account of the continuous desire to clear the throat which it causes. It is often quite local, though it may be coupled with nasal or bronchial catarrh.

Symptoms : A constant desire to clear the throat of a viscid mucus which adheres to the cords, each attempt rather increasing than diminishing the desire. The voice is deep, and often breaks or is hoarse, especially in lecturing, preaching, or singing.

With the aid of the laryngoscope the cords are, as a rule, only slightly more vascular than normal, but shreds of mucus or pellets of thick, sticky, green mucus occupy the larynx. This secretion prevents the voice being raised, and causes the desire to clear the throat.

The treatment is, of course, to remove the cause, in which often lies a difficulty—whether it be climate, damp or clay-soil residence, public speaking, or the abuse of alcohol. It is necessary to avoid clearing the throat; it is better to speak through it and let the viscid mass separate itself. Efforts to displace it have little or no effect but to annoy the patient. Anti-catarrhal remedies should be adopted—warmth to the skin; entire covering of flannel should be worn and should not be put aside in hot weather, though a thinner texture may be worn. Laryngeal catarrh in England is as common in winter as in summer, because of the careless exposure of the skin to changes of temperature. In male patients the growth of the beard may prove curative if the disease be limited to the larynx ;

if associated with nasal or bronchial catarrh, a pill of quinine, ipecac, opii or conium. Local applications of spray have, in my experience, proved of no avail. Astringent lozenges, rhatany, tannin, etc., which are given by many, in my opinion, are more injurious than useful, for they constipate the bowels and do not touch the disease.

Occasionally cases of this disease run on to a form in which the cords are quite discolored, the hoarseness most marked, perhaps complete aphonia, all attempts to speak being accompanied by extreme laryngeal fatigue. Such cases, though actually only a catarrh, are accompanied by infiltration far deeper than the mucous tissue and assume the character of chronic laryngitis. In these cases the occasional application of the brush with a strong solution of chloride of zinc or nitrite of silver is admissible. But I rely chiefly on galvanism.

So far we have spoken of inflammation attacking the mucous membrane. Now, if it attack the deeper tissues of the larynx the disease is best expressed by the term laryngitis.

The Clinical Significance of Fibrinous Exudations upon the Mucous Membrane of the Upper Air Passages.

Dr. FRANKE H. BOSWORTH, thus concludes an article in the *N. Y. Med. Journal*:

The points, then, on which I would place especial emphasis are as follows: 1. A fibrinous exudation which occurs in the crypts of the follicles of the faucial or pharyngeal tonsil, or of the mucous membrane of the lower pharynx, has no tendency to extend, and characterizes a disease which is self-limited and which involves no dangerous tendencies. 2. A fibrinous exudation which occurs upon the sur-

face of the tonsil or of the mucous membrane of the fauces, constituting a croupous membrane, so-called, presents gross appearances by which it can be unmistakably recognized. It is easily detected, and can be peeled off from the parts beneath without lacerating the tissues. It is a white, clean, healthy-looking membrane, and presents every aspect of a living tissue. 3. A croupous membrane in the fauces of an adult marks the existence of a disease which, while being undoubtedly a blood-poison, is still a self-limited affection, and one which involves no danger to life. 4. A croupous membrane forming in the fauces of a child marks the occurrence of the same disease as a croupous membrane in an adult; but in the child there is the additional danger of a new center of development occurring in the larynx, where it may involve the greatest danger to life, but mainly as a mechanical obstruction to breathing. 5. A diphtheritic membrane developing in the fauces marks the occurrence of a disease which is dangerous to life, not only from primary and secondary blood-poisoning, but also from the tendency to the development of the same morbid process in the larynx.

Cough of Phthisis.

OXALATE of cerium has been used quite successfully as a palliative to the cough in phthisis. It has the very great advantage of not disturbing the digestion or bowels. To preserve the appetite of a consumptive is quite as necessary as to relieve his cough. Thirty grains of the oxalate is given at bedtime and repeated before morning, if necessary. Ten grains may be given every few hours during the day if necessary. A little chloral hydrate or spirits of chloroform combined with the remedy often greatly assists its action.

CONSTITUTIONAL DISEASES.

Treatment of Typhoid Fever.

Dr. C. W. KELLY (*Med. Herald*):

One of the first steps in the treatment of this affection is attention to hygienic measures. Look to the ventilation of the sick room. Have the patient's bed placed in a large, well-lighted room, with sufficient out-door communications to allow the free entrance and exit of atmospheric air. Every patient should be allowed from 1,000 to 1,500 cubic feet of fresh air—it is nature's disinfectant. Let the temperature of the room be pleasantly cool, ranging from 60° to 65° F. Next direct your attention to cleanliness. Have the patient sponged off in cold or tepid water once or twice a day.

Although there is no means at our command by which the attack may be averted, yet it might be well to call your attention to a few of the methods that have been recommended for the purpose of modifying the course and severity of the disease. Emetics have been tried. Patients have been tortured with ipecac and tartar emetic, with no other effect than to render them thoroughly miserable and impairing their strength. Cold water as a prophylactic measure, has also failed. Wunderlich and Pfeuffer and Liebermeister, our great German authorities, advocate the use of quinine in large doses. Although having the highest regard for their opinions, we are not prepared to indorse their views on this subject. No one will doubt that quinine has the power of lowering the temperature in typhoid fever for the time being, but that it is capable of extinguishing the fever entirely, or in any way shortening or modifying the course of the disease we positively deny.

Some high authorities speak of the beneficial effects of calomel, given in 5 to 10 grain doses every three or four hours. We tell you to avoid cathartics.

In simple, uncomplicated typhoid fever, where the pulse ranges from 90 to 100, and shows no weakness, when the temperature does not rise above 102° F., then the less we do for the patient the better are his chances for recovery. Feed him, avoid medicines, and the indications for treatment are fulfilled.

But we have yet to notice a severer form of this disease, found further north, in which the high temperature, the weak pulse, and numerous complications jeopardize the life of our patient. A continued elevation of temperature threatens life by causing rapid and extensive metamorphosis and paralysis of the heart. A temperature above 103° F., if accompanied by a pulse of 120, if continued for any length of time, is dangerous, and must be reduced as rapidly as possible. What measures have we at hand to meet the indications? The Germans recommend the use of the cold bath. They advised that the water at first be 10° lower than the temperature of the patient, and gradually cooled down by additions of cold water until the fever is lowered from 1° to 3° according to circumstances. There is a great prejudice among the laity, however, against the bath, which it is impossible to overcome. Another objection to its use is the want of proper appliances, especially in country practice. The wet pack is used to accomplish the same purpose, the patient being enveloped in a sheet saturated with water about 65° or 75°, placed between blankets until the reaction takes place and profuse perspiration ensues, then finally rubbed off dry

and put back to bed. This has proved to be of considerable value as an antipyretic measure. Another, and probably the best plan on account of its easy application, is to sponge the patient from head to foot every half hour to three hours with tepid water during the height of the fever. A small quantity of alcohol or a few drops of acid may be added to the water with benefit. By this simple means the temperature may be reduced from 1° to 3° F.

Besides these measures, several drugs have been recommended on account of their antipyretic properties. Among these we find quinine loudly praised, especially by our German authorities. *Veratrum viride* has also been used with asserted benefit, but its depressing action on the heart, and the nausea and vomiting frequently produced should contra-indicate its use. Salicylic acid, a powerful antipyretic, in 20 to 30 gr. doses, has been proposed, but the question of its efficacy is still under consideration. *Digitalis* is probably the only drug of this class on which we can rely. The tincture given in 20 to 30 drop doses when the pulse is feeble causes a decided reaction of temperature. It is the only heart tonic we possess and should be given fearlessly. These are the measures suggested for the purpose of removing the dangerous pyrexia.

Let the patient have all the cold water to drink that he desires. In the event of his becoming apathetic direct the nurse to insist on his taking it at regular intervals. It may be acidulated with mineral acids without harm, and probably with benefit. Chambers, Huss and Murchison recommend the use of small doses of the mineral acids as possessing a modifying influence over the disease. There is no objection to their use, and it gives the patient an idea that something is being done.

Another condition of grave importance that demands our attention is slow asthenia, which steals upon the life of our patient like the fox upon its prey. Have we any measures by which we can combat asthenia? Fortunately, yes. We rely on alimentation and stimulation as the only safeguards against it.

In selecting diet for our patients we should choose those articles which are most easily digested and assimilated. Heading the list we place fresh milk. It contains all the elements necessary to make up the human body, and at the same time is readily digested by the most delicate stomach. The infant subsisting entirely on the mother's milk increases in strength and weight, all the wants of the system being supplied by it until the period of dentition. As to the amount necessary, this will depend on the requirements of the case entirely. You may give from a quart to half a gallon of cold fresh milk in the twenty-four hours, a little lime water being added to promote digestion and overcome acidity of the stomach. Next in value as an article of food we recommend eggs. These two substances either alone or combined, are by far the most nutritious of invalid foods, containing, as they do, in a concentrated form all that is necessary for the support and repair of the animal economy. Should the patient live on a constant diet of milk and eggs he would acquire a distaste for it and you may substitute now and then a little mutton or chicken broth, some barley water, or something of a similar nature, but never, under any circumstances allow the taking of solid food.

So much for alimentation. Now a word about stimulation, our remaining weapon against asthenia. By stimulation we refer to the use of alcohol in some of its forms, the best probably be-

ing whisky, on account of its being well borne and assimilated, and besides it can usually be obtained pure. Should the pulse be full and strong, the skin moist, and there be but little elevation of temperature, the whisky is not indicated, and it would probably do harm. But if, on the contrary, we have an excessive temperature with dry, hot skin, and find on placing our ear to the chest wall that the first sound of the heart is valvular in character or lost entirely, then give according to its effects. You can give as much as an ounce an hour if necessary, but in some cases only two or three ounces a day are required. You must be governed entirely by its effects. If you find the pulse getting slower and stronger, the delirium less marked, and the temperature falling, the tongue and skin becoming moist, and the breathing more tranquil, you may be sure your whisky is doing good. The reverse of these symptoms calls for a withdrawal of the stimulants. A good plan is to combine the whisky with the milk and egg in the form of egg-nog, or with milk alone in the form of milk punch. These combinations are frequently taken with relish, when separately they appear distasteful to the patient.

We shall now consider some of the symptoms which call for special treatment, and may be classed as complications. Headache, sometimes a prominent symptom in the early part of the disease, is best treated by cutting off the hair and applying cold to the scalp, either by means of cloths wrung out in cold water, to which may be added bay rum, cologne, etc., or by the ice-bag. It usually lasts but a few days. Vigilance and delirium we relieve by the same local means and the internal administration of bromide of potash, hydrate of chloral and opium—the last named drug being the most efficient. For the relief

of the nausea and vomiting that sometimes occurs, attention to diet is usually all that is required. Diarrhœa, unless profuse, we need pay but little attention to. But when the discharges are frequent and exhausting we are called upon to interfere and check them. By the use of no drug can this be accomplished as well as by opium. And why do we prefer this to other drugs! Opium does more than simply overcoming peristalsis and checking diarrhœa—it relieves pain, quiets vigilance, gives rest, and supports the system—it is the enemy of prostration. If we had our choice of any one drug to be used to the exclusion of all others in typhoid fever, we would without hesitation select opium.

Epistaxis we treat by means of cold applications, and when necessary (which is seldom the case) by plugging the posterior nares. For hemorrhage from the bowel there is no better prescription than opium, combined, if you please, with some mineral and vegetable astringents. If perforation has taken place, and the patient lie with legs drawn up, the pulse feeble, the countenance anxious, suffering the exquisite torture of peritonitis, give him opium—give plenty of it and nothing else. Narcotize him. This, with hot applications to the abdomen, constitutes the entire treatment necessary.

On the Treatment of Intermittent Fever.

A portion of a clinical lecture by Prof. DUJARDIN BEAUMETZ, Paris, published in *St. Louis Courier of Medicine*.

It remains for me now, having finished the enumeration of medicaments, to tell you how to use them to obtain as speedily and economically as possible the cure of intermittent fever. I emphasize the word economically, for this is an impor-

tant matter. Do not forget that sulphate of quinine is to-day sold in our drug stores at a medium price of $1\frac{1}{2}$ francs (or about 30 cents) a gramme; in regions, moreover, where the marsh miasm is prevalent you are apt to find an indigent population, and it will always be incumbent on you to effect the desired therapeutical results with minimum quantities of quinine, that is to say, with the least possible expense.

We ought from the point of view of the treatment of intermittent fever to examine the following points, and in their order: treatment of ordinary intermittent fever, treatment of pernicious fever (malignant intermittent), treatment of the paludal cachexia. Finally we shall finish by a rapid examination of the hygienic conditions which one should recommend to prevent the development of intermittent fever.

As for the treatment of ordinary intermittent fever, we should place ourselves in two special conditions: either the individual resides at a distance from the marshy locality, or he is still exposed by his residence to the marsh miasm. In the former case by the sole fact of his removal to a more healthy region he may get well; this it is that explains how in our hospitals at Paris we are in such an unfavorable position to study the anti-periodic action of certain medicines. For generally the intermittent fever which we observe is light, and consists of relapses in individuals who have formerly contracted malaria in other countries. Therefore we cannot rely altogether on trials made in the hospitals of Paris in deciding the febrifuge virtues of this or that medicine, and it is in regions where this fever reigns that such essays should always be made. In Paris then you can witness the disappearance of intermittent fever under the influence of repose, a

simple emetic, or a small dose of sulphate of quinine. When your patient resides in the country where the marsh miasm is developed, your treatment will be more difficult, and you will have to study successively what preparations to use, at what moment to give it, and the proper dose. As for the choice of the preparation, you had better discard all pretended succedanea of quinine, also the powdered peruvian bark and the various sold remedies that contain it, the extracts of cinchona as well; not because they are inert but because they are more beneficial in the chronic form of marsh poisoning than intermittent fever. You should reject also all the other alkaloids of cinchona and rely on quinine alone, whose effects can be determined with almost scientific precision. You should prescribe either the sulphate or the hydrochlorate of quinine and I cannot too strongly urge you, breaking the bonds of tradition which has given the preference to the sulphate, to use the chlorhydrate instead, a salt more soluble, more rich in quinine, and for that reason more active. In adjoining countries this substitution is an accomplished fact, and we should not be behind them in this regard. You will administer the chlorhydrate of quinine in solution when your patient is poor, in capsules when he is rich, and you will understand the reason for this; the capsules as I have before told you, are a little less active than the solution: as for the latter the simplest and most economical way consists in causing your patient to take his quinine in a small glassful of rum or brandy. But what shall be your dose, and when shall it be given? I will explain. You know that the attack of intermittent fever is characterized by periods or stages, which are described under the names of. period of chill, period of heat, period of sweating; that moreover,

according as the fever returns every day, every two days or every three days you have to do with the fever in a quotidian, tertian, or quartan form. You know also, that these types may be double, and then you have double tertian and double quartan. I shall not dwell on this point, and pass at once to the consideration of the first question, at what period should you give the sulphate of quinine to derive the most advantage from it? Practitioners have long hesitated between three methods; that of Torti called the Roman method, that of Sydenham called the English method, and that of Bretonneau, called the French method. According to Torti's method, you would give the quinine at the moment of paroxysm, not to arrest it but to prevent the following ague fit. Sydenham gave his peruvian bark in one large dose after the attack, and in smaller doses in the interval; Bretonneau and Trousseau followed the method of Sydenham but they employed larger doses which they gave immediately after the attack; this is also Briquet's method, who would have at least fifteen hours between the giving of the dose and the ague fit which he wished to prevent. While admitting the views of these three French authorities with regard to massive doses I believe that the space of time which separates the administration of the doses from the onset of the attack is too long, and I am of the opinion that it is well to give it, not as Torti recommends, at the period of chill, but three to four hours before this period. I advise you then to give your quinine in one dose three hours before the paroxysm. As to the dose, it should be variable according to the intensity of the fever, and you can give 50-75 centigrammes or one gram (from 7 to fifteen grains) of chlorhydrate or sulphate of quinine. When the fever is tertian, which

is its most frequent type, you should give your quinine every other day, and note the action of your medicine, which ought to produce retardation and diminution in the intensity of the attacks until they completely disappear. Even then it is not best to cease the administration of the quinine, but to continue it for eight days or so, in smaller doses, a short time before the usual return of the paroxysm. All the rules which I have given apply to simple intermittent fever and you should change your mode of treatment when you have to do with pernicious fever, (called malignant remittent, or intermittent fever). This kind of fever, as you are aware, manifests itself by attacks of great gravity and may be fatal in the first, second or third attack: here then there is no precise therapeutic rule and as soon as you have diagnosticated the pernicious character of the affection, you must administer your quinine even during the paroxysm, in the promptest way possible. You know that in light cases Jousset of Bellesma, does not hesitate to have recourse to intra-tracheal injections of quinine, and I am inclined to think favorably of this practice; at any rate we witness here the triumph of sub-cutaneous injections and you ought always to resort to them, whether you make use of the bromhydrate, the sulphovinate or the lactate. You will require large doses, and you ought never to hesitate to give fifteen or twenty grains, and even twice as much, increasing your dose according to the urgency of the case; there have been cases where as much as 75 grains have been administered.

When the individual has for a long time suffered from attacks of intermittent fever and when, moreover, he continues to live in localities infested by malaria, grave modifications are often infected

in the functions of certain viscera. The spleen becomes enormously hypertrophied, the liver is enlarged, the blood is profoundly altered and symptoms supervene whose aggregate constitutes the malaria cachexia. I shall not here describe this cachexia but what I can assure you is that the alkaloids of cinchona are impotent against it. Here you will often witness the triumph of arsenic, and hydro-therapy is of benefit. This last means is one of the most powerful resolvents in splenic and hepatic engorgements, and signal success has been obtained in these cases by douches of cold water directly over the spleen or liver. Here the tonic medication is indicated under all its forms, but all means of this kind are without avail if the individual does not submit to the hygienic treatment which enables him under certain circumstances to avoid the toxic action of the marsh miasm. This hygienic treatment I shall now explain. The measure of prevention are of two kinds; the one on which I shall not now insist, concerns the drying-up of the marsh itself and its purification, the other concerns private hygiene. As for the first you know that three methods have been employed to get rid of stagnant waters; namely by filling in with earth, draining off the water by suitable ditches, and, finally, subjecting the land to thorough drying; and in many countries where marshy regions exist attempts have been made by the expenditure of enormous sums of money and arduous labor to render those localities healthy.

As for private hygiene, the physician and physiologist can do much to establish rules as to residence and alimentation.

You know that the higher you ascend the less you have to fear from marshy emanations; you know, too, that these

emanations are carried to some distance by the wind; and this is the reason why a habitation should be chosen on a high elevation and sheltered from the winds that blow over the marshes.

The dietary of the patient should be restorative, and wine should be a part of it; water that is drank should be pure and free from any paludal contamination. Despite all these precautions, you will not always be able to avoid the malarial intoxication. Nevertheless there remains for you one resource, namely, to keep the inhabitants of miasmatic countries continually under the influence of Peruvian bark. In fact there is no doubt that cinchona and its derivatives possess a prophylactic property and in a recent expedition to the gold regions of Africa the English officers derived great benefit from the preventive and protective use of salts of quinine. This is a very important fact and I cannot too much recommend to you, when called to advise persons who are going to travel through or sojourn in countries where this marsh miasm prevails, to insist upon the adoption of a prophylactic treatment by the salts of quinine.

This finishes what I have to say about the treatment of intermittent fever.

Inoculation of Intermittents.

DR. C. GERHARDT, (*Zeitsch. f. Klin. Med.*, vii. 4), instituted in two individuals the following experiments: He abstracted blood from a patient while the latter was suffering from a seizure of intermittent fever, and inoculated with this blood two healthy persons. He observed the following precautions: 1. The locality in which the experiment is to be made must be totally free from malaria. 2. The persons whose blood was employed for this purpose must not

suffer from syphilis or any other inoculable disease. 3. The persons to be inoculated must agree to the experiment and voluntarily subject themselves to it. 4. The temperature record of the individuals to be experimented upon must have been carefully kept for some time preceding the experiment, and evince not the least increase of temperature. They must have been at the time of the operation, and for a long time preceding the same, utterly free from all febrile symptoms.

The experiments themselves gave the following result: 1. The intermittent fever, caused in this manner by inoculation, is distinguished from the natural malarial fever by greater irregularity of the attacks of the former. 2. After a number of single or group-wise attacks, a regular quotidian analogous to the form present in the original source, developed itself in the one person on the twelfth day, in the other on the twenty-fifth. 3. The fever thus artificially produced reached in both cases such a high degree (temperature as high as 41.1°C ., and deviation of fever fully twenty-four hours), that the experiment had to be interrupted by the administration of quinine. 4. There is no doubt that the pathogenic element of malaria is present in the blood of a patient suffering from intermittent fever at the time of a seizure, and that it is then, together with the blood, inoculable. 5. With very few exceptions all the seizures by which the inoculated persons were attacked, set in at the hour at which the inoculation had been made, or if they had not done so (as was a few times the case), they reached their acme at that time. The period of incubation was difficult to determine, the first febrile movement made its appearance in the one case on the seventh, in the other on the twelfth day, and the graver series of seizures began in the

one on the seventeenth, in the other on the twenty-fifth day.

This agrees with what has been usually taught to be the period of incubation—from seven to twenty-one days.

Intermittent Fever.

Quiniae dextro, 3 ss.; acid. mur. dil., q. s.; tr. nucis vom., 3 ss.; ext. tarax fl., glycerine, āā ʒ ss.; aq. ad, ʒ ii. M. Sig. Teaspoonful four times a day.

The Fever of Growth.

The *Med. Record*, quoting from *Centralb. fur Chir.*, says: This affection, first described by BONILLY, in 1880, is characterized by a fever pursuing a specific course, and accompanied by pain and tenderness in the epiphyses of nearly all the long bones, and is followed by a period of very rapid growth of the individual. It may occur at any time between the fifth and twenty-first year. It is occasioned by excessive exercise, as long walks, standing for a considerable time, fatiguing gymnastic exercises, swimming, etc. Bonilly distinguishes three forms of the disease: 1. Acute, with rapid course, the most common. 2. Acute, but more protracted than the first. 3. Chronic or relapsing (*trainante*).

Fever or tenderness of the bones are common to all these forms. The pain occupies the "juxta-epiphysal" zone, and is most commonly located in the lower ends of the femora, though all the long bones are not infrequently affected. The joints are not involved, as a rule, though sometimes serous effusions, more especially in the knees, are met with. The more rapid form runs its course in from twenty-four to thirty-six hours. The second variety may be of several days' duration, and may even be

accompanied by typhoid symptoms, but its termination is always by a rapid return of temperature to the normal. The chronic form is characterized by a succession of attacks running along for weeks and months. The prognosis is favorable, though relapses are common. Quinine should be given during the attacks, and in the intervals all fatiguing bodily exercises should be avoided, while attention is directed to a building-up of the general condition. The following case of growing fever is reported by Dr. Guillier: A child, eleven years old, of rather delicate constitution, was taken suddenly ill with convulsions, high fever and pain in all the extremities. There was tenderness over the epiphyses of the femur, tibia, and humerus on either side. A slight improvement on the next day was followed by an increase in all the symptoms in the evening. Under antipyretic treatment the fever subsided on the third day. After five weeks the child was able to leave the bed, though she was still very weak. During that time the height increased two and one-half inches.

Bryonia, Asclepias, and Baptisia.

The two former of these medicines, whose special province seems to be to allay irritation of serous membranes, sometimes surprise us with their kindly and positive influence.

Well do I remember, some years ago, of attending on a Mr. F., æt. 40 years, German descent, usually healthy, strong and robust, but then suffering with severe pleuro-pneumonia, and most intensely with the pleuritic stitch, which was so interfering with respiration as to be alarming at times; and after prescribing the usual sedatives, aconite and veratrum for fever, with full doses of Dover's powder and morphia to con-

trol the pain, and feeling confident of early relief, I repaired to the country. But some hours after my visit, instead of the expected relief the pains in the chest became more severe and the interference with respiration more alarming, and another physician, my friend Dr. T. G. Matheny, was called to administer to him until my return. His prescription was tinct. bryonia and tinct. asclepias aa gtt., xx.; water, $\frac{3}{4}$ iv. M.; sig.: One teaspoonful every thirty minutes until pains were relieved, and every hour thereafter.

On my return and learning the above facts, having confidence in the intelligence of the physician, and seeing the relief approaching, I continued the above prescription, not resuming the opiates, which had been set aside. Next morning I found my patient almost entirely free from pain, and fever very much abated, perspiration well established, and my patient very cheerful.

During the week following the pains would occasionally return, but would again subside under the influence of the bryonia and asclepias. This repeated experience strengthened my resolution to study to know more of these remedies, and to more fully test them in other cases, which I did, usually with good satisfaction. After careful study and experiment, I find, as I believe, the physiological effects of bryonia to be sedative to serous membranes especially, and thus a remedy in irritation of such membranes, whether of the chest as in pleuritis, or in the joints as in articular rheumatism, or abdomen as in peritonitis, and more especially if the pains are lancinating and accompanied by a tension of the muscles of the affected part, and excessive tenderness on pressure or motion of the parts, accompanied with restlessness, high fever, hot skin and hard chorded pulse. Asclepias, as

a type of diaphoretics, certainly quiets the nervous system, brings down the temperature, induces perspiration, relieves pain in serous membranes, and is thus a valuable remedy in such inflammations, and especially when accompanied with a hot dry skin.

Although I have used baptisia for many years in my treatment of children in septic fevers, believing it to be antiseptic and thus antifebrile, I confess, however to many disappointments in its use, and a very imperfect knowledge of its real nature, and although we think we know more about it now than we did in former years, yet we know but very little, compared to what we believe is to be known of its therapeutic properties.

I remember reading an article written by Prof. Scudder, of Cincinnati, in which he regarded it as an antizymotic, and its antiseptic and antifebrile properties depending on its power to antidote a peculiar ferment or poison in the blood causing the attendant fever, and this having peculiar manifestation, different from any other poison, producing a peculiar dusky color of the face, like one who has been exposed to severe cold. He recommended it in cases where the sepsis produces a deep red or violet color of the mucous membrane, with brown or black shade or tinge, and especially where there is foul breath, with a tendency to ulceration, and since using it in that class of cases, and in ulcerative sore mouth and throat, especially where there is any putrescence, both locally and internally, I am the better pleased with its effects.

Dose to child: Tinct. baptisæ gtt. xx.; aquæ dest., $\frac{3}{4}$ iv. M. S. One teaspoonful every one or two hours.—From paper by Dr. CASEBEER in *Journal of the American Medical Association*.—*Therap. Gazette*.

The Therapeutic Application of Nitrous Oxide Gas.

From a series of experiments made in Prof. Botkin's laboratory in St. Petersburg, Dr. S. Klikowitsch draws the following conclusions:

1. Nitrous oxide gas is incapable of supporting respiration in animals and plants, and, like other indifferent gases, leads to death from asphyxia. The asphyxia produced by this gas, however, presents points of contrast to the asphyxia produced by other means.

2. Nitrous oxide gas produces no chemical or morphological changes in the blood of animals, but is dissolved in it and again eliminated, according to physical laws, without apparently being broken up into nitrogen and oxygen.

3. Anæsthesia with laughing-gas is so closely associated with insufficient oxidation of the blood that it cannot be regarded as absolutely without danger, especially in diseases of the heart, lungs, or blood-vessels.

4. The association of laughing-gas with twenty per cent, of oxygen completely removes the possibility of asphyxia and produces a number of results capable of therapeutic application.

5. Under the influence of the mixture of laughing-gas and twenty per cent. oxygen, in the majority of healthy subjects, the heart's pulsations are increased, the pulse-wave diminished, and the respiratory movements decreased in number and increased in depth; these effects pass off in from three to five minutes.

6. In six cases of weak heart-action, the above gaseous mixture produced no unfavorable results; on the other hand, the pulse was decreased in frequency and increased in strength. These effects lasted from one to two hours.

7. In cases of disturbed respiratory innervation the mixture of laughing-gas and oxygen regulated the respiratory rhythm and rapidly removed the subjective and objective signs of deficient oxidation of the blood.

8. This gaseous mixture acts as a transient anæsthetic, and in angina pectoris causes a rapid removal of suffering.

9. It is to be preferred to chloroform as an anæsthetic in labor.

10. Vomiting and cough of reflex origin are arrested by a few inhalations of this mixture of gases.—*Virchow's Archiv.* xii.v 2.—*Med. Times.*

Salicylic Acid.

PROF. BARTHOLOW finds the following more efficient than salicylate of sodium alone: \mathcal{R} . Acid. salicylic, \mathfrak{z} ij; Sodii bicarb. \mathfrak{z} j; Aqua, \mathfrak{z} ij; Sig.—Dose, one to two teaspoonfuls.—*Med. Bulletin.*

Vertigo.

DR. L. H. WASHINGTON. (*St. Louis Med. Journal*). This is usually caused by determination of the blood to the head, or dyspepsia and constipation. The following prescription of ex-Surg.-Gen. Hammond will relieve it in either case. \mathcal{R} . Bromide of sodium, \mathfrak{z} j.; fluid extract of ergot, \mathfrak{z} ij.; saccharated pepsin, \mathfrak{z} iij.; powdered willow charcoal, \mathfrak{z} iij.; water, \mathfrak{z} ij. M. Sig.—A teaspoonful every three or four hours. Dr. E. H. Sholl says: In plethoric vertigo it has been my custom for years past to use veratrum viride freely. Ordering perfect quiet, in the most comfortable position to the sufferer, ten drops of the fluid extract or tincture are given at once. The same or a smaller dose is persistently given every three hours until relief is obtained,

which is usually the case as soon as the least characteristic effect of the medicine is produced. It is then cautiously continued, due attention being paid to the secretions. Bromohydric acid, fifteen drops in a little water every fifteen minutes, will sometimes give relief. Vertigo is often one of the symptoms of hardened ear wax, and will disappear on the removal of the latter. Soak the auditory canal with a warm solution of bicarb. soda, a drachm to the half pint, and then remove the wax by syringing with tepid water.

In those exhausted conditions of the nervous system in females, indicated by headache, vertigo and extreme excitement, the following is valuable: \mathcal{R} . Bromide of calcium, \mathfrak{z} j.; syrup lactophosphate of lime. \mathfrak{z} iv. M. Sig.—Teaspoonful in a little water three times a day.

The most common kind of vertigo arises from disordered digestion, and can be referred to the stomach, or functional derangement of the liver, and may occur suddenly, either day or night. In this form of vertigo we never find a loss of consciousness, as we may when it depends on organic brain lesions. An empty stomach and excitement make it worse, stimulants relieve it, and closing the eyes to shut out all external objects relieves it. In hard drinkers the vertigo may last for days and render them unable to move. This form of vertigo may be effectually relieved by the following treatment: The patient, if a man, must be free from the care and anxiety of business. Upon arising in the morning a cold sponge or plunge bath, with subsequent friction on the body with a Turkish towel, and friction at night, before retiring, with a Turkish towel. No malt liquor must be indulged in. The diet must be plain, regular and well masticated. A little

Vichy, with a very little brandy, may be used as a drink. The patient must retire early, and sleep in a large, cool room. After each meal alkalies must be given to neutralize any formation of acids in the stomach, and to excite a free secretion of the gastric juice; and before each meal a pill of 1-32 grain of strychnine, or strychnia in combination with compound tincture of genetian, may be given, or five drops of tincture of nux vomica. This treatment will prove all that is necessary in most cases.

In the treatment of vertigo from overwork and anxiety, rest and freedom from all care and work is an essential part of treatment. If oxaluria is suspected, the administration of fifteen drops of the dilute nitro-muriatic acid before each meal will generally remove it, and the bromide of ammonium may be advantageously administered. The treatment of vertigo complicated with brain troubles must be guided by the particular group of symptoms which present themselves in any given case.

The application of the galvanic current of electricity in all forms of vertigo will be found to be of great service, either as central galvanization, or by the application of both poles on each side of the sixth and seventh cervical vertebræ, using from twelve to twenty cells, as the case may be.—*E. C. Mann, M. D.*

Vertigo is a common symptom of a torpid liver or billiousness. In such cases use, until the liver is brought into healthy action: *R.* Euonymus atropurpureus (wahoo), $\bar{5}$ j.; whiskey, qt., j. M. Sig.—A tablespoonful three or four times a day.

Dr. Alonzo Clark has successfully treated many cases of dyspeptic vertigo by giving five drops of muriatic acid in five tablespoonsful of water after each

meal. Pepsin, ten to fifteen grains, is sometimes added with benefit. Dizziness is so common a symptom in cardiac affections, and particularly in aortic insufficiency, that when the accident occurs, one thinks rather of a lesion of the heart than of any other malady. Of all brain symptoms caused by masked affections of the heart, dizziness leads to the most deplorable mistakes on the part of both physician and patient. It is not at all rare to find patients who complain of a feeling of weakness, or absence of buoyancy, for which they have some plausible excuse; when the dizziness occurs in the morning, it is laid to the vicinity of the stomach, excess of mental exertion, or, perhaps, physical exertion, or moral emotion. The physician consulted believes willingly in a symptomatic vertigo of cerebral ischæmia in a case presenting the external attributes of anæmia. In a contrary case he suggests congestion, which is extremely rare, as far as the idiopathic symptoms are concerned. The physician, informed of these facts, will most often discover the existence of latent heart disease, and will aim to secure his patient from symptoms as dangerous as unexpected. In such cases, iron, which English physicians frequently unite with digitalis, is absolutely contra-indicated. Iodide of potassium, on the contrary, often gives excellent results. Agina pectoris, which is a frequent complication in these cases, is best treated with hypodermic injections of morphine and chloral for the paroxysms, and bromide of potassium and digitalis in the intervals.—*Prof. Geo. Sea.—St. Louis Med. Jour.*

Rectal Etherization.

A short time ago M. MOLLIÈRE called attention in the *Lyon Medical* to a

method of administering ether by the rectum. The novelty of this mode of administration at once seized the minds of several well-known medical gentlemen in New York and a practical test was applied. We find in the *Med. Record* of May 3d, articles from the pens of Drs. William T. Bull, George F. Shrad-y, James B. Hunter and Robert F. Weir, giving the individual experience and the experiments conducted by these gentlemen in producing anæsthesia by the rectal method. The tests which have been employed so far seem, for the most part, favorable, and the new method is likely to fulfil an important place in the roll of etherization. Whilst more extended experience is required to perfect the details of etherization by rectal administration, the fact has been established that an anæsthesia can be produced with less distress to the patient, with less vomiting and with less excitation than by the cone method. It has been observed that the vapor is readily absorbed and the general anæsthetic effect soon obtained, from two to six minutes being required to bring about a condition of complete anæsthesia. The quantity of ether used is about the same. The patients recover from the effects of rectal sooner than the ordinary etherization and manifest less subsequent distress and excitement. On these points, however, the observers have noted different results, so that it is too early yet to assume the advantages of the method as claimed by Moll-iere. That this method is not without danger the experience of Dr. Weir fully shows. The drawbacks to the method may be stated briefly. First, the degree of etherization is not always as thoroughly under control as by the cone method, since after complete anæsthesia an amount of vapor may be left in the intestines sufficient to deepen the anæsthe-

sia beyond safe limits. Second, intestinal irritation may prove a very troublesome complication and the cause of diarrhœa, or of hemorrhage and death. The new method is not considered necessary for prolonged operations. It is recommended chiefly as a valuable addition to the cone method, since it removes the sense of suffocation and distress of inhalation in the first stages of etherization. When the patient has once come under the ether influence by rectal administration prolonged anæsthesia may be continued by inhalation. It appears from the testimony so far offered that this will be the true limit of its applicability and that it will not supercede but become a valuable addition to the method of etherization by inhalation.

The method of administration by the rectum is as follows: In a graduated reservoir or glass is placed one, two or three ounces of sulphuric ether as circumstances may indicate. A large rubber-tubing, eighteen inches to two feet in length, with a vaginal nozzle of a Davidson's syringe is connected with the reservoir. The tube is introduced into the rectum and the glass reservoir in a vessel containing water at a temperature varying from 120° to 140° F. As the ether boils the vapor is given off freely and absorption takes place by the rectum. The bowels should first be moved by an enema and it is deemed advisable that food should be withheld six or eight hours previous to the administration. In the cases reported by the gentlemen named above there was a marked freedom from unpleasant symptoms such as excitement, suffocation, nausea and vomiting. A sense of fullness from the distention of the bowel with gas and a tendency to loose passages were the only unfavorable symptoms noted. The last named condition was observed in seven out of

seventeen cases observed by Dr. Bull, and was the probable cause of death in a child aged eight months anæsthetized by Dr. Weir. These two gentlemen speak with great caution against the reckless administration of ether by the rectal method chiefly on account of this dangerous symptom. As the new method has already attracted a great deal of attention, we shall probably be able soon to refer at greater length to its numerous advantages and disadvantages.—*Med. Med. Jour.*

DISEASES OF THE URINARY ORGANS.

Determination of Albumen in Urine.

In the *Brit. Med. Jour.*, May 3, 1884, Dr. OLIVER describes a ready method for the quantitative determination of albumen in urine. The proceeding consisted in comparing the opacity produced by a test-paper in a definite measure of the albuminous urine with a standard of opacity which represented a known per cent. of albumen; and in adding water when it exceeded the standard, until the two were seen to be exactly equal. The standard opacity (representing 0.1 per cent. of pure serum albumen) was preserved in a permanent form by precipitating chemically pure alum by means of ammonia, the opaque fluid being sealed up for use in a short flat tube. The estimations were made in a flat graduated test-tube of a determined diameter, three-eighths of an inch. A definite quantity of the urine (20 or 40 minims, according as the urine was strongly or only moderately albuminous), was poured in, and the albumen was precipitated by either a ferrocyanic or a mercuric test-paper. The opacity almost at once produced was compared with that of the standard by placing

immediately behind the tubes printed lines; when it over-stepped it the urine must be diluted to the required degree. The number of times the volume of the urine had been increased by dilution represented so many decimals per cent. of albumen; for example, 20 minims of urine requiring to be diluted to 180 minims, contained .9 per cent. Dr. Oliver showed, on taking the twenty-four hours' urine, how readily by this method the total amount of albumen daily discharged could be expressed in grains; it was only necessary to multiply the percentage by 4.36 (or roughly $4\frac{1}{2}$), and the number of ounces of urine; for example, .6 per cent. by $4.36 = 2.6$ gr. to the ounce, by 50 oz. = 130 grs., total loss of albumen in twenty-four hours. In this way, he believed that accurate data could be provided without loss of time, for comparing the effects of treatment on the amount of albumen eliminated; and he suggested that quantitative analysis of albumen might become useful in diagnosing the forms of renal disease.—*Med. & Surg. Reporter.*

New Test for Albumen.

Dr. G. JOHNSON recommends as the surest and most reliable test for albumen, picric acid in powder form. The smallest possible quantity of the powder added to the undiluted urine, will at once reveal the presence of albumen.—*Ibid.*

The Treatment of Diabetes by Douches of Air.

At a recent meeting of the Paris *Société de Thérapeutique*, reported in the "Progrès Médical" for April 5th, M. COMPARDON alluded to three cases in which he had treated this disease by currents of air directed upon the verte-

bral column and the neck. In all the cases there was a notable diminution of the amount of sugar excreted with the urine. This amelioration was sustained and was accompanied by improvement in all the other symptoms. Each douche was continued from five to ten minutes, but we find no mention of the frequency of their repetition or of the temperature of the blast. The local effects are said to be a blanching of the skin and the formation of a cup-like depression, with a moderate reduction of temperature. After the douche the skin becomes of a bright-red color, and remains so for three or four hours, during which time there is local sweating.—*N. Y. Med. Jour.*

DISEASES OF THE NERVOUS SYSTEM.

An Excellent Nerve Sedative and Tonic.

Fl. ex. coca, $\bar{3}$ ij; Fl. ex. viburnum, $\bar{3}$ j; Fl. ex. apium graveolens, $\bar{3}$ j, M. Dose, one or two teaspoonfuls three times a day.—*Med. World.*

Treatment of Wry Neck by Sulphate of Atropia.

Dr. W. M. LESZYNSKY, the reader related the history in the case of a young woman, whose occupation being that of a book-folder, she was obliged to turn her head very frequently toward the left side. The right sterno-cleido-mastoid and trapezius muscles be came affected with a very severe form of clonic spasm, which almost exhausted the strength of the patient. The treatment adopted was the daily injection of sulphate of atropia into the contracting muscles, beginning with gr. 1-80, and gradually increasing to gr. 1-6, which maximum dose was continued four days, when recovery supervened.

In addition to the atropia galvanism was used, and the faradic current was applied to the opposite side.—*St. Louis Med. Journal.*

An Anodyne Mixture without Opium.

Dr. A. P. MEYLERT, of New York, has published a formula somewhat resembling that of chlorodyne, and writes: It has given me no little anxiety to find a suitable anodyne for patients cured of the opium habit. In attacks of intestinal colic or neuralgia, to which they are subject, any preparation containing morphia is necessarily excluded, since it would at once bring back the old habit. The following formula is the result of various experiments, and has been used with good results in my cases. Perhaps its publication may lead others to relate their experience likewise: R. Chloroform, 100; Ether. sulphur. spts., .025; Tinct. cannabis, .175; Acid. hydrocyan. dil., .030; Hyosciamia, q. s; Ol. menth. piperit, .003; Tinct. capsici, .003; Alcohol, 95 per cent., .350; Glycerine, ad. 1.000; Dose, 10-30m.—*Med. Record.*

Prescription for Nervous Prostration.

Phosphoric acid, dil. $\bar{3}$ j; Elix. calisaya, $\bar{3}$ iv; Elix. val. ammon, $\bar{3}$ ij; Glycerine, $\bar{3}$ ii j; Sherry wine, ad. Oj. M. S.—One to two tablespoonfuls three or four times a day.—*Ibid.*

DIGESTIVE TRACT.

An Easy and Safe Method of Sounding for Impacted Gall-Stones.

A paper on this subject was recently communicated by Dr. GEORGE HARLEY to the Royal Medical and Chirurgical Society. The method recommended in

the paper for indubitably ascertaining the existence of impacted biliary calculi was illustrated by the narration of a case in which it was successfully performed in the following wise : The patient, a lady aged 36, who had been (under the care of Dr. Diver) for many weeks suffering from the signs and symptoms of obstructed bile duct, was placed under an anæsthetic. Dr. George Harley inserted a six-inch long French exploring trocar midway between the umbilicus and margin of the liver an inch and a half to the right of the median line. Its point being pushed upwards and backwards in the direction of the common bile duct, no hard substance was met with; on the stilette being withdrawn ascitic fluid came away, and the canula could be moved freely in all directions. The instrument was withdrawn and reinserted an inch higher up, and about two inches to the right of the umbilicus. On pushing it in the same direction as before, to the depth of six inches, its point struck into a hard substance, presumed to be a biliary calculus. It was endeavored to estimate the size of the stone by pressing the end of the cannula without the stilette firmly against the hard substance, and moving the point of the instrument all round it. The inference was that the stone was the size of a hazel nut. The punctures were closed by means of sticking plaster, and the abdomen bandaged. The signs of obstruction now began rapidly to disappear, and it was supposed that the operation had caused the stone to change its position in the duct, and had thus enabled it to pass along into the duodenum. Convalescence at once set in, but was of short duration, for an attack of enteritis supervened, followed by peritonitis, and the patient succumbed twenty-seven days after the sounding, and

twenty-four after the stone had evidently left the duct. At the autopsy the thirteen calculi shown to the society were found still in the gall-bladder, the longest being an inch in length, the next the size of a hazel-nut, the remainder all much smaller. The facets on the opposite ends of the large calculus showed that another stone, the size of a hazel-nut, must have existed, but come away. The paper ended with the following conclusions : (a) That the presence of an impacted gall-stone may be readily as well as safely ascertained in the way described. (b) That not only the position, but even the size and shape of an impacted biliary calculus may be instrumentally ascertained. (c) That a knowledge of these facts may possibly induce surgeons to undertake the earlier artificial removal of dangerously impacted gall-stones than heretofore ; an operation which the author of the paper thought ought to be, under ordinary circumstances, no more hazardous to the life of the patient than the operation of lithotomy. He believed that the fatality that had hitherto attended the operation had been almost entirely due to the fact of its having been delayed until the exhaustion of the patient precluded the possibility of recovery.—*Med. Med. Jour.*

A Report of Three Hundred and Five Cases of Habitual and Temporary Constipation Treated with Cascara Sagrada.

C. EMILIUS THOMPSON, M. R. C. S
Having had an opportunity of making extensive observations on the action of cascara sagrada in constipation, for the past seven months, it may not be uninteresting to others who are making use of this recent addition to our purgative medicines, to record, while attesting its great value, a few cases in which the

exhibition of the drug has been followed by untoward effects.

With regard to the form of administration, I have generally used the fluid extract combined with liq. bismuthi and bicarbonate of soda, in cases of atonic dyspepsia, which have been accompanied with temporary sluggishness of the bowels. In these cases, two or three ten-minim doses are usually sufficient to produce a first evacuation without any preliminary dose of other aperient medicine. The motions are, as a rule, soft, but formed, and unaccompanied by griping or tenesmus. In this kind of case, and in this dose, the best results have been obtained. In confirmed habitual constipation, the fluid extract, in my hands, has, after a time, begun to lose its effect, except in a gradually increasing dose. One grain of the solid extract, however, combined with two grains of *extractum berberis aquifolium* in a pill, taken night and morning, has successfully reduced the most obstinate habitual constipation of the bowels to regularity of action, though continued in the same dose for a period of five or six months.

Occasionally, however, the remedy is not well tolerated. Among strong men within the prison (whence 229 of my observations have been drawn), I have found violent and almost immediate vomiting follow a ten-minim dose of the fluid extract in three cases. In another man, a single dose of ten minims produced such griping as to render the administration of an opiate necessary; and, in addition, purged the man several times. I subsequently ordered this man half the dose twice daily, which produced two evacuations regularly. In private practice, ten minims, three times a day, has produced, in a man 65 years of age, exhausting diarrhœa (unaccompanied by pain, however), which it was

somewhat difficult to arrest; while, in another patient—a young woman of 25 years of age—two doses of ten minims, at an interval of not less than four hours, produced excessive diarrhœa, with vomiting, violent twisting pains around the umbilicus, cramps in the legs, a pinched countenance, and clammy perspiration. The effects in this case were, fortunately, of not long duration (four or five hours), and seemed to pass off as suddenly as they had set in.

I have used the drug in varying doses at all ages, from five months to seventy years, and, with the exception of the instances I have mentioned, have found it extremely useful. At the same time, it is plainly advisable to use some caution in the size of the commencing dose, and to direct the patient to omit the medicine if the first dose causes much pain or other adverse symptom.

Cascara sagrada is said to act chiefly by increasing the peristaltic action of the intestines. It is certainly not the rule for watery stools to follow the administration of the drug, while the griping occasionally experienced points to excessive muscular action of the bowels, raising the hope that it may prove of use in certain cases of fœcal retention, due to or inducing intestinal paralysis. I have not yet met with a suitable case of this kind in which to test the powers of the drug.—*Brit. Med. Jour.*

Remedy for Dyspepsia.

The following excellent prescription for dyspepsia is given by Dr. ALFONSO in the *Med. & Surg. Reporter*: R. Jensen's pepsin, gr. cxcij; sherry wine, ʒ viiss; glycerin puris, ʒ iss; acid tartaric, gr. v. M. Sig f ʒ j, after meals. This is three grains of the pepsin to each teaspoonful.

CONSTITUTIONAL DISEASES.

Albuminuria in Typhoid Fever.

Dr. JOHANNES MYGGE (*St. Louis Cour. of Medicine*): In the third service of the Communal Hospital at Copenhagen, the author has had occasion to observe 217 cases of typhoid fever. In a third of these cases the urine has been examined every day or every two or three days until death or convalescence. The search for albumen has been made simultaneously by means of heat and nitric acid (Heller's test). The author has reached the following results:

1. In fifty-two (72 per cent.) of the above mentioned patients, the urine contained an unquestionable portion of albumen. In nine there was only a problematical trace, and only for eleven did the examination give a negative result. So albuminuria has appeared with far greater frequency in his researches than in those of most other authors, without always showing so great a constancy as in the researches of Gruber.

2. Albuminuria appeared ordinarily before the end of the second week of the disease. In three cases it had already supervened at the fourth day.

3. The albuminuria was transitory (from one to three days) in sixteen cases; for the thirty-six others it lasted from five to eighteen days, except in some lethal cases, where it was only observed two or three days, as also in some other cases where it was associated with a cystitis or with a cysto-pyelitis, and lasted for 110 days.

4. Of twenty-six patients suffering from considerable and persistent albuminuria ten died, while of the forty-six other patients none succumbed.

5. Chronic Bright's disease as a con-

sequence of typhoid fever was not observed in any of the 217 patients.

6. Of the patients affected with albuminuria more than half suffered from nephritis, as shown by the examination of the deposits, and the other objective and subjective symptoms furnished by the urinary passages. In most of the remaining patients the albuminuria was principally the symptom of a cystitis or a cystopyelitis.

7. Of eighteen patients, offering evident clinical symptoms of a renal affection, ten died and eight recovered.

8. In all these cases the symptomatology did not confirm the thesis of Amat and other French clinicians, that nephritis complicating typhoid fever, gives a characteristic clinical picture, which authorizes us to refer these cases to a particular type (a renal form), although for two of the patients the symptoms of the renal affection were so decided as to mask the principal disease.

The excretion of urea was not constantly diminished, and the variable attacks observed so frequently in the lethal cases could not be referred to the accumulation of urea in the blood.

9. It follows from the observations of other authors, as also from mine, that an organic renal affection, and not a functional derangement, is generally the cause of the albuminuria, and that this affection is most often only a parenchymatous nephritis, but that it also occasionally produces alterations in the cellular structure.

10. When the symptoms of nephritis are evident, the treatment demands great caution with respect to the application of cold baths. It is necessary in general to commence with baths at a temperate of 26° C. to 24° C. (79° to 75° F.), and descend gradually to those of the temperature of 20° C. (66° F.)

Large doses of quinine, sometimes

occasioning collapse, it will be necessary to administer this remedy also with prudence.—*Nordiskt Medicinskt Arkiv.*

Typhoidal Orchitis.

Dr. A. OLLIVER ("Rev. de Méd.") has been able to collect from the literature of typhoid fever and from personal experience twenty-seven cases in which acute orchitis occurred as a complication or a sequela of typhoid fever. The occurrence was noticed as long ago as 1844 by Velpeau, and has since been referred to occasionally by different authors. Various theories of its origin have been propounded, to all of which Olliver objects as either unproved or contrary to the clinical features of the disease. Thus, Vidal's theory that the orchitis is due to a thrombosis of the spermatic veins, Duffey's, that it is rheumatic in origin, Hallepeau's, that it arises from parenchymatous changes in the testicle similar to those in the liver, the spleen, and other organs, are all more or less at variance with the facts in the cases which he has examined; and the other hypothesis—that the involvement of the testicle is due to masturbation, to urethral inflammation, or to a temporary congestion of the gland, like that occurring in the parotid—are mere assumptions, unsupported by any valid evidence. The distinguishing features of true typhoidal orchitis are as follows: It comes on generally during the period of convalescence from the fever (in twenty-one cases out of twenty-seven); it is usually unilateral; it generally affects the testicle alone, less frequently the testicle and the epididymis together, and but rarely the epididymis alone (in three cases); it terminates in suppuration in nearly one-fourth of the cases; it adds no gravity to the prognosis of the fever.—*N. Y. Med. Jour.*

Ulcerous Typhoid Sore Throat.

DR. E. RAPIN (*Rev. de Therap.*) thus formulates his experience:

1. Typhoid fever effects the throat more often than is generally supposed; in fact, the first symptom may be a sore throat of an ulcerous nature.

2. The ulcerations are superficial, rounded, or, more usually, oval, with a slightly elevated border, hard floor, ordinarily indolent, and generally situated on the anterior pillars of the fauces, and on their anterior face.

3. Their diagnosis is sometimes very difficult; it is only by frequent examination and attention to the general symptoms that they can be certainly recognized. These ulcers seem specially to affect the lymphatic system; the lesions of the lymphatic apparatus are identical with those found elsewhere in the course of typhoid fever.

4. Their development is due to the direct penetration of the typhoid germs into the follicles of the faucial region.—

Ibid.

Oil of Turpentine in Intermittent Fever.

SCELAND (*Wratsch*): The report of 276 cases are before him, which have been treated with ol. terebinthinum; 150 were treated with it exclusively, while 126 had to have quinine in addition. The course of the disease lasted seven days. The dose is five drops of ol. terebinth. or three drops with two drops of alcohol; forty drops in all are sufficient to bring on convalescence. Only lately did it cause nausea, vomiting and purging.—*St. L. Med. Jour.*

Alumen Ustum in Intermittent Fever.

SCHIDOWSKI (*Wratsch*): Burnt alumen has long been known as a febrifuge. S——. does a large country prac-

tice, being alone in a district of 70,000 inhabitants, and he had only three pounds of quinine at his disposal for a whole year. He resorted to alum with good results. Two doses of eight grs. each, one to three hours before the recurrence of the fever, effected the object. The powder is given dry and water is drunk copiously after it. He also saw enlargement of the spleen reduced by it.—*Ibid.*

Caffein.

As the result of a physiological and therapeutical study of this drug Dr. LEBLOND, Paris, arrives at the following conclusions:

(a.) *In physiological doses.* 1. Caffein is an excitant to the nervous and muscular systems. 2. It decreases the pulse rate, at the same time increasing the force of the heart beat and the blood pressure by vaso-motor constriction. 3. It reduces the surface temperature. 4. It has no influence on the formation or excretion of urea.

(b.) *In toxic doses.* 1. Caffein increases the motor-excitability of the spinal cord, paralyses the peripheral sensitive nerves and lowers the excitability of the vagus. 2. It causes a sudden lowering of the vascular tension by paralysis of the vaso-motor nerves. 3. In cold-blooded animals the heart beats slower and slower until it stops in systole; in mammalia it is accelerated towards the end and stops in diastole. 4. It causes a tetanic condition of the muscles. 5. The temperature falls suddenly. 6. It retards nutrition.

(c.) *In therapeutic doses.* 1. Caffein is generally borne better than digitalis and when begun in small doses is free from the unpleasant effects of the latter. 2. It regulates the heart, slows its rate and increases its working capacity. 3. It is more or less diuretic. 4. It is

not only a substitute for digitalis but in dangerous cases its effects are quicker and more certain. 5. The administration must be commenced with a small dose, not more than three grains, to test the susceptibility of the patient, then increased to eight or ten grains. It is useless to exceed twenty grains. 6. It may be used in all cases of heart disease in which digitalis is indicated, given with or without the latter. 7. In pyrexia caffein seems to reduce the temperature; at any rate it is very useful in such cases as a heart tonic. It is often very beneficial in albuminuria. 9. Finally it seems to stimulate the muscular walls of the intestine in strangulated hernia. —*Lyons Med.—N. E. Med. Monthly.*

Humane Blistering.

When we think how painful the results of blisters are to our patients, and yet how valuable they are, we will hail with pleasure the following suggestion of Dr. SAMUEL STRETTON in the *Brit. Med. Jour.*:

In an illness about fifteen years ago, I myself suffered considerable distress following the application of a large blister (which, no doubt, was instrumental in saving my life); but since that time I have never directed a similar torture for others, though I obtain satisfactory results from the blistering process I do employ. I direct the surface requiring such counter-irritation to be well covered with annular blisters about the size of the human iris, cut from vesicating tissue with an ordinary gun-punch, the centre being extracted with a punch of small size. Once secured to the surface, and covered with cotton-wool and bandage, these blisters require no further attention. The discomfort created is so slight that I never meet with the slightest resistance to their application. —*Med. & Surg. Reporter.*

Common Salt in Pleuritic Effusions.

Dr. TOM. ROBINSON, in the *British Medical Journal*, relates a case of pleurisy with effusion, accompanied with "cold clamminess of hands and brow, and breathing 51 times in a minute, the pulse barely appreciable at the wrist, and the heart pushed over to the right." He was ordered a teaspoonful of common salt dissolved in a wineglassful of water every hour, at the same time sweating by a hot wet flannel and a piece of waterproof sheeting. At the same time two ounces of the common black draught were administered, and all fluids were stopped. Two hours afterwards "he had most markedly improved in every way," his respiration being 48 per minute. In ten hours "he could lie on either side and get well down in bed." Next day there was no embarrassment of breathing, and all his subjective symptoms had disappeared. He was now given one drachm of common salt twice a day, with good nourishing food, and in a week he was up and out of doors. —*Ibid.*

Solution of Gallic Acid.

Dr. FREDERICK LONG (*British Med. Jour.*) writes that ten grains of citrate of potassium will dissolve fifteen grains of gallic acid in an ounce of water. This is an important discovery, as heretofore no feasible means of dissolving the acid has been known.

[We have tried the above and find that the gallic acid is not wholly dissolved; but that if equal quantities of the salts are used, a perfect solution follows.—ED.]

Anti-Spree Mixture.

Pepsin, pure (in scales), 20 parts; water, 2,000 parts; hydrochloric acid, 15 parts; oil of sassafras, 6 parts. Mix;

shake well. Take a tablespoonful hourly. Half-ounce doses of liq. ammon. acetatis, at intervals of two to four hours, in water, is a favorite in many hospitals, and three drops of tincture of nux vomica, in a little water, taken every hour, is a good remedy for bracing up on. These mixtures are chiefly serviceable for quieting the disturbed stomach, but are of little value in relieving the disorganization of the nervous system that ends in delirium.—*New Remedies.*

A Tonic Pill.

The following formula is highly recommended in the *Med. Press and Circular*: Reduced iron, 1 gr.; ext. cinchona, 4 grs.; arsenious acid, 1-10 gr.; ext. nux vomica, 1-5 gr.; gentian, q. s. For one pill. One three times a day.

Salicylage.

This is the term applied to the practice resorted to in Paris of using salicylage acid as a preservative of food and drinks. The attention of its injurious effects was recently referred by the government to Prof. Brouardel, who reports as follows: 1. The daily use of even the smallest dose of salicylic acid is unsafe, its innocuity not having been as yet demonstrated. 2. It is certainly dangerous for the subjects of lesions of the kidneys or of the liver from old age or by some degenerative process. 3. The prohibition of salicylage should be strictly maintained.—*Med. & Surg. Reporter.*

The Use of Tobacco by Boys.

In the course of an article on this subject, Dr. EDWARD O. OTIS (*Boston M. & S. Jour.*) says: The evil effects, then, of tobacco upon boys which can be said to have been fairly proved by observation, are: 1. An interference

with and impairment of the general development, physically and mentally. Probably it does this by retarding progressive cell change, and impairing nutrition. In an adult, the development is attained, consequently he can smoke with impunity so far as this effect is concerned, when the boy only does it with injury. 2. The tobacco heart. This likewise happens to the adult, but is, I should think, more likely to happen to the youth, and with graver results, because his is such an unstable age physically. For this same reason, the other injurious effects are more liable to be intensified in the youth. 3. Defective muscular co-ordination. I have but little proof to show that this condition is more than temporary, continuing only while the tobacco is used. 4. It reduces the intellectual power of the boy. It does this either by opposing mental application and effort, or else by producing deterioration of the intellect, probably both to a greater or less extent. 5. It impairs the memory. What proof I have adduced seems to show that this is a permanent injury. 6. It may cause defective vision, and also irritation, more or less chronic, to the external parts of the eye. 7. It may unduly excite the sexual system, and lead on to excesses. I have no positive proof of this, but my observation among boys rather points to it. 8. Irritation of the mucous membranes of the mouth and throat, more especially in case of cigarette smoking. 9. It may impair digestion, and produce other derangements, such as habitual uneasiness, hypochondriasis, and so on.

Tuberculosis with Asthmatic Symptoms.

Certain forms of tuberculosis are, according to Professor GERMAIN SEE, difficult of diagnosis because of the fact

that the most prominent symptom is the frequent occurrence of attacks of dyspnoea simulating very closely ordinary asthma. The recognition of this form of phthisis is all the more important, since between true asthma and tuberculosis there exists an antagonism by reason of the atrophy of the alveoli and destruction of the capillaries consequent upon emphysema, thus opposing a barrier to the development of tubercle in the lungs. The following are the chief points of value in the differential diagnosis: True asthma occurs usually at night, manifesting itself in sudden oppression of breathing, difficult inspiration, and sibilant expiration, and at the termination of the attack there is a peculiar expectoration. The return of the paroxysms in each individual is always accompanied by phenomena of a remarkable sameness and peculiar to that patient. These precursory phenomena are most frequently a nasal catarrh with the anomalous sensations resulting from it, tympanitic swelling of the stomach and intestines, diuresis, or a change of character in the individual, with an inaptitude for work. Nothing of this kind is seen in the dyspnoea of tuberculosis. Almost always the attack is brought on by some exertion, quick walking, going up-stairs, rapid muscular movements, or the effort of severe coughing, or repeated vomiting. It occurs usually in the daytime, the patient seeks repose and generally obtains relief by lying on the back. There is no whistling expiration, the respiratory movements are increased, but at times there is no such marked distinction. The pseudo-asthmatic paroxysms may be clearly intermittent, may occur at night, and may be followed by catarrhal symptoms. The liability to error in such cases is all the greater, since the general condition of the patient is

usually so good as not to give rise to a suspicion of tuberculosis, and it is only by studying the general and physical symptoms with great care that we are able to arrive at a correct diagnosis. The asthmatic form of tuberculosis is of very slow growth. The general symptoms are slight and the patients often preserve their digestive functions unimpaired for years. They have but little fever and only a moderate cough; the expectoration, though muco-purulent, is not abundant. The general condition, indeed, is so good that it is often an occasion of surprise to find at the apices the evidences of sometimes pretty extensive tubercular infiltration. The prognosis is fairly favorable, yet, as in other forms of tuberculosis, it should be based partially upon the state of the digestive organs.—*Revue Médicale.—Med. Record.*

Hypodermic Injections of Iron.

At the Pennsylvania Hospital Dr. J. M. DA COSTA is using hypodermic injections of iron for anæmia in case of combined malarial toxæmia and lardaceous disease of the viscera, including the intestinal glands. To the other solutions for this purpose he prefers a double salt produced by the addition of pyrophosphate of iron to a solution of citrate of sodium: Two grains of the salt in this form are given every day, varying the points of puncture, but generally administering it under the skin of the extremities; in this form no abscesses have been observed. With other solutions of iron, including dialysed iron, abscesses were quite common, even with every precaution as to the cleanliness of the syringe. In a case last winter of idiopathic anæmia (pernicious?) these injections not only arrested the patient in a downward course, but actually worked such a change that his

strength and appetite returned, and he was afterwards discharged in good health. This case is not called pernicious anæmia because the patient did not die; but if an opinion could be based upon the previous course of the disease, and his chlorotic condition at the time of the change in his treatment, no other diagnosis and no other prognosis would have been entertained than that mentioned by any ordinary observer.—*Boston Med. & Surg. Journal.*

Diphtheria.

Dr. COONS thus concludes an article in *Med. & Surg. Reporter*: Given, a typical case of diphtheria of average malignity, in a child of eight or ten years of age, at an early stage of the disease—for then only is treatment of most avail—I would give, if the nervous chill has not passed, a teaspoonful of tinct. opii camph. to calm the nervous shock and quiet the aching limbs, after which I would clear the alimentary canal by a mild laxative, and at once give the following: *R.* Potassii chloridi (not chloratis), ʒ j; tinct. ferri chloridi, fl. ʒ ij; syrupi scillæ fl. ʒ ss; syrupi simplicis, q. s. ad. fl. ʒ ij. *Misce. Sig.*—One teaspoonful in a little syrup or water every three hours; to be continued throughout the disease, but at lengthened intervals, after all diphtheritic membrane shall have disappeared.

With each dose of this alterative syrup I would give (according to frequency and hardness of pulse) from two to six drops of tinct. veratri viridis, till the pulse has been reduced to normal frequency and softness, and then in lessened doses every six or eight hours, till cessation of all tendency to febrile excitation.

Should an expectorant seem called for, I would direct: *R.* tinct. sanguinariæ

canad; tinct. ipecacuanhæ, āā fl. 3 ss; tinct. opii camphoratæ, fl. 5 ss; syrup. tolutani, q. s. ad. fl. 5 ij. Misce.—Teaspoonful as needed to loosen or quiet cough.

From the first, food of some kind, preferably milk, soup, or other liquid or soft animal food, should be given at least as often as every three hours—say after each dose of medicine.

Local Treatment.—Believing that the systemic infection largely springs from the constant inhalation and ingestion of the putrid products of the local disease, coupled with the retention of effete matters produced by the irritative fever, I consider the local treatment quite as important as the systemic.

If hot fomentations be good for an inflamed hand, why not for an inflamed and swollen throat? We will try them; and knowing the solvent power of acetic acid over diphtheritic membrane, we will add to the fomenting water as much acetic acid as we may without irritation of the external surface (from 1-8 to 1-16 part), trusting that the inhalation of the vapors ever rising from the hot fomenting cloths will stimulate secretion and prevent deposit, if the vapor do not also redissolve membrane already formed in the fauces and air passages. The fomentation may be by flannel cloths or sacks of linseed meal reaching across the front of the neck from ear to ear, and kept frequently wetted in the *hot* diluted acetic acid (or vinegar in its absence), and well covered with dry flannels to preserve the heat. Should the skin become irritated, the proportion of acetic acid must be lessened, or it must be omitted altogether from the fomenting liquid, lest we have a raw surface, forming a new nidus for the further extension of the disease. For direct application to the diseased fauces, nares, etc., I have found nothing so good as a satu-

rated solution of chemically pure acetate of lead, to which may be added, when necessary (which is rare), a non-irritant antiseptic. This solution may be best applied in spray by means of an atomizer, but a gargle is of service, and the following powder dusted upon the parts will materially assist in causing the removal of any diphtheritic deposit formed in the fauces: ℞. Plumbi acetatis (C. P.) pulv., pulv. gum. acaciæ, āā 3 j. Misce. Sig.—a small quantity to be blown upon the diseased parts two or three times a day. This may be done through a roll of letter sheet.

When the larynx becomes involved, the inhalation of hot steam from a saturated solution of acetate of lead in dilute acetic acid furnishes probably as hopeful treatment as any with which we are acquainted.

Summing Up.—Relieve nervous shock, clear the alimentary canal, give veratrum viride till its constitutional effect is felt in a *softening* and *slowing* of the pulse, give the iron and chloride of potassa alterative steadily throughout the disease, adding an expectorant when needed; and most important foment assiduously for the first few days, applying the acetate of lead freely and often to the diseased fauces. Lastly, forget not to feed liberally throughout the disease, and to stimulate and support freely by alcoholics and tonics, as the exigencies of the case call for, in the wane of the disease.

DISEASES OF THE NERVOUS SYSTEM.

Salicylic Acid a Cure for Tic Douloureux.

We frequently meet in our practice cases of tic douloureux, that often so exceedingly painful neuralgia of the fifth nerve, where an operation seems

to promise the only radical cure. If we hear of a remedy which is said to have the same effect as the surgical interference, we become doubtful; but if no less reliable an authority than Prof. NUSSBAUM (*Munich, Erztl. Intelligzbl.*, 38, 1883) assures us of the fact, our hope increases. Recently a number of such cases had been sent to N. for the purpose of having the operation performed, and, after a number of carefully instituted experiments, this great surgeon recommends a trial with salicylic acid before proceeding to stretching or to resection of the nerve. In all the recently-sent cases he first tried this remedy, and he found it in every one a radical cure; not only a palliative effect, but really an utter disappearance of the painful disease was the result in every case. Especially in cases of rheumatic nature, N. is positive of having discovered in salicylic acid a specific for tic douloureux. He administered the drug in the following manner: *R.* Acidi salicylici, 0.2, gr. $3\frac{1}{3}$; sodii salicylatis, 2.0, gr. 32; *M. ft. pulv.* Within 24 hours the patient takes from 4 to 6 of such powders.—*Med. & Surg. Reporter.*

Treatment of Migraine.

The following is a portion of an article by Dr. C. H. HUGHES, published in *Weekly Med. Review*: The bromides are the best remedies for the precursory restlessness and fidgets; so also the tranquilizing warm bath, if that be at the time convenient to the patient, so that he will not be too much disturbed in being put into it. Valerian root added to the bath is of value to the hysterical. Under this treatment the tingling sensations and temporary numbness disappear. Hot pediluvia, bottles and sinipisms to the feet, also to the spine or stomach, are serviceable in ar-

resting temporary vital prostration. The bath and the bromides serve also to tranquilize the heart and relieve the head by diverting the blood to the feet, for while the carotides are full the radials are small, and the peroneals are smaller. I have known the hemianopsia, which is a subjective phenomenon due to encephalic sanguineous pressure, to disappear during the bath, and to be arrested by the bromide treatment preceding the coming on of the attacks, likewise the photopsia and photophobia. Contrary to the statement of Latham and others, that bromide of potassium is more serviceable during the attacks than in the interim, I affirm that if properly employed, so as to secure a restful state of the nervous system, and a tendency on the part of the cerebrum when not actively employed to seek repose, its effect is decidedly beneficial in prolonging the interval and shortening the attacks, and finally in preventing the recurrence of the latter altogether. To accomplish this end the bromide must not be given to sanguineous saturation, and, to be enabled to rely on the smallest quantities of this salt, galvanism must be conjointly employed and with persistent regularity, especially if bromism is shown either in eruption or impaired mobility or cerebral stupidity. The temporary hyperæmia of migraine is induced by defective vaso-motor innervation, and consequent paralysis of control over the caliber of the cerebral arteries, which are thus allowed to produce a painful degree of cerebral distention; the turgid brain even robs the face of blood, and the pupil contracts not only because the retina is hyperæsthetic, but because of irritation of the ophthalmic ganglion and the origin of the third nerve in the gray nucleus in the floor of the sylvian aqueduct. It is astonishing how descending cephalic

galvanization, or galvanization over the cervical sympathetic centre, and under the ramus of the jaw, will cause these symptoms to disappear by the restoration of tone to the vaso-motor system that controls the circulation within the head; but to make the relief permanent, sleep must follow and rest absolute to the brain, as tired nature demands, until recuperation from the exhausting causes that precipitated the attack comes in the course of nature's benignant vis medicatrix, assisted by our art. These conclusions are not conjectural, but based upon a success in the management of migraine that has not disappointed, and been satisfactorily verified in the writer's own person also. The view of Wilks and others respecting the incurability of migraine is too discouraging and unjustifiably hopeless, due to neglect of suitable management in the interim of the attacks, just as frequently recurring hysterias are thus too much and too often neglected. One of my patients, formerly (eighteen years ago) a two days' victim to migraine prostration every fortnight, now and for fifteen years past has only occasionally, once or twice a year, a reminder in the return of the boring sensation over the eye or on the temple, which a prompt electrization and a drachm of bromide of potassium in peppermint water causes to disappear. The rest of the treatment he has learned himself—it is to cease going so fast with his work for the time, and take more rest for a few days, and not to fret because he can not accomplish the work of two days in one.

Treatment of Epilepsy.

In a clinical lecture published in *Med. & Surg. Reporter* Dr. WM. PEPPER says in conclusion: Until the discovery of the great anti-convulsive

powers of the bromides, all forms of anti-spasmodics and anodynes had been used for this purpose, and of them, it may be truly said that nearly all of them were injurious far more than beneficial. There are cases in which these drugs are to be used to fulfil special indications. Certain remedies directed to the nervous system, as the oxide and valerianate of zinc and preparations of silver, notably the nitrate, have well established cures to their credit. There is a widespread impression among the populace that nitrate of silver cures fits. Many of those suffering from argyria are people who, suffering from epilepsy, have gotten hold of a prescription containing nitrate of silver, and have on their own responsibility continued its use for a long time. It is not an easy thing to produce argyria, and it requires a good deal of nitrate of silver to do it; but if a person takes half a grain of the drug, three times a day, for from eight to twenty-four months, intense discoloration of the skin will be produced. Nitrate of silver has undoubtedly cured a certain number of cases of epilepsy. When we reflect upon its mode of action it is difficult to think that its good effect is due to a direct influence upon the nervous system. The cures effected by nitrate of silver seem to have been in cases in which a marked tendency to epilepsy has been associated with disturbance of the gastro-intestinal canal, which has served as a source of peripheral irritation, and this cause of the convulsions having been removed, the patient has recovered. In such a case, its effect is not due to a direct influence upon the nervous system, but to its well-known alterative action upon the surfaces with which it comes in contact. This is another illustration of the importance of attending to peripheral conditions. I presume that arsenic, in

the same way, by its alterative and stimulant action, in removing anæmia or some malarial condition, or some trouble of the abdominal organs, has taken away the cause predisposing to the convulsion.

As you know, there is a class of anti-convulsive remedies which contain nitroglycerine, nitrite of amyl, and all the bromide series, of which the bromides are the most valuable. Their discovery has greatly modified the treatment of epilepsy, and has enabled us to control symptoms in nearly all cases, and to effect a cure in a certain proportion of cases otherwise totally hopeless. Few more valuable additions have been made to the pharmacopia than is this class of remedies. A vast deal of damage has been done by the reckless and excessive use of the bromides, but great good has been done by a proper and judicious use of these remedies. There are certain plain rules which can be laid down in regard to the use of bromides in epilepsy.

The bromides should at first be given in small doses, and only one of the bromides be given, I do not care which one. After studying the effect of this, larger doses may be given, a combination of bromides or another bromide substituted for the first one given, if the effect is not satisfactory.

The evidences of bromism must be carefully watched, for not only should you look for acne, but also for evidences of mental weakness and nervous depression, which are among the worst results of the constitutional action of these drugs. When these symptoms are produced, the bromides are doing more harm than good, even if they control the attacks. The use of large doses of bromides under these circumstances may produce secondary trouble more serious than the original disease. Nor

should the use of bromides be permitted to become too habitual. Of course, some exceptions to this rule have to be made. There are persons who are perfectly well while using the bromides, but who, on stopping them, begin to have convulsions. The spells may be held absolutely in check by doses of from ten to fifteen grains of bromide of potassium or sodium three times a day, although they continue this dose for years. These are instances of the best results of these drugs. In the average case, the result is not so good. While a full dose is taken, the patient is better, but still continues to have a few attacks. Under these circumstances it is better to interrupt the use of bromide for a time, and either substitute some other anti-spasmodic, or allow the patient to go without any drug for a time, than to keep it up constantly and increase the dose as the patient becomes habituated to it.

You will find the details as to administration in your books. Acne can often be prevented by associating a little arsenic with the bromide. The great underlying principles are that the bromides should be used at first in small doses which may be cautiously increased; that where they are continued for some time, changes should be made in the mode of administration; that a careful watch should be maintained lest symptoms of a serious bromism appear, and on their development, the bromide should be stopped, no matter how urgent is the apparent necessity for its continuance; that where the attacks are not absolutely controlled, the bromides should be occasionally interrupted in order to allow the patient to regain his normal condition, instead of increasing the dose, that only in those cases in which the bromides procure complete, or almost complete immunity,

should their use be continued without intermission for a long period of time ; and that while employing these remedies care should be taken to prevent disturbances of digestion from their administration.

DIGESTIVE TRACT.

Chronic Enlargement of Spleen.

DR. BARRY sends the following prescriptions to the *Med. World*.

1. Fld. ext. ergot, $\bar{3}$ j.; Dialysed iron, $\bar{5}$ j. Teaspoonful three or four times a day.

2. Podophyllin, 4 grs.; Iod potash, 3 ij.; Fld. ext. stillingia, $\bar{3}$ iv.; fld. ext. phytolacca, $\bar{3}$ iv.; syrup rhei. pot. comp., $\bar{5}$ iij. Teaspoonful in water one, two or three times a day after meals, using freely comp. tinct. iodine externally.

3. Tinct. cinchona comp., $\bar{5}$ viij; ammon mur, $\bar{5}$ j; aqua menth. pip., $\bar{5}$ xij. Teaspoonful three times a day before meals.

4. Quinine sulph., 3 ij.; ammon iod., 3 ijss.; liq. potass. arsen., 3 ss.; glycerine, $\bar{5}$ iv. Dissolve and take a teaspoonful three times a day.

5. Tinct. iodine, $\bar{5}$ j.; tinct. camphor, $\bar{5}$ j. Take six to ten drops in syrup after meals.

6. *Sadberry Spleen Mixture*. Quinine sulph, 3 j.; ferri sulph., 3 j.; acid nit., 3 j.; potash nitrate, 3 iij.; aquæ, $\bar{5}$ x. Teaspoonful three times a day.

7. Cinchonidia sulph., 3 jss.; pulv. ferri sulph., 3 jss.; sulph. acid arom., 3 ij.; magnesia sulph., $\bar{5}$ jss.; acid nit., gtt. 30; aqua dist., $\bar{5}$ x. Tablespoonful before meals.

8. Cinchonidia sulph., 3 jss.; soda hyposulphite, $\bar{5}$ j.; solvent q. s.; aqua, q. s. $\bar{5}$ iv. Teaspoonful three or four times a day.

9. Quinine sulph., 3 j.; ferri sulph., 3 j.; strychnia sulph., 1 gr.; aloes soc., 10 grs.; M. ft. pil. 60. One three times a day.

10. Potash iod., $\bar{5}$ j.; aqua, $\bar{5}$ vj. Teaspoonful two times a day.

11. Cinchonidia sulph., 3 j.; ferri sulph., 3 j.; strychnia sulph., grs. 2; acid arsen., grs. 2; soc. aloes, grs. 10. M. ft. pil. 60. One three times a day.

12. Ammon. iod., 3 ij; aqua, $\bar{5}$ iv. Teaspoonful every three or four hours.

13. Tinct. iodine, $\bar{5}$ j. Take five drops three times a day.

14. Soda hyposulph, 3 j.; aqua, $\bar{5}$ iv. Teaspoonful three times a day.

15. Soda hyposulph., $\bar{5}$ vj.; quinine sulph., 3 j.; ferri ferrocyan, 3 iij.; aqua, 3 iv. Teaspoonful three times a day.

16. Cit. iron and quinine, 3 ij. Take five grs. three times a day.

17. Ferri oxy. sulph., $\bar{5}$ j.; cinchonidia sulph., 3 jss.; potash nit., 3 iv; aqua, q. s. $\bar{5}$ vi. Take a teaspoonful three times a day on full stomach.

Ferri Oxy. Sulphate is made as follows: Ferri sulph., $\bar{5}$ j.; acid nitric, $\bar{5}$ j.; aqua pura, $\bar{5}$ vj. Mix.

For local use: 1. Biniodide of mercury, 3 j.; vaseline, $\bar{5}$ j. Use every day over spleen with hot iron.

2. Inject fld. ext. ergot 3 drops eight or ten into substance of spleen—repeat in ten days.

3. The comp. tinct. iodine or ointment of iodine is sometimes used with benefit.

Slop Diet.

There can be no question in the mind of any thoughtful man that diet must have a great influence upon the course of disease processes, hence it is that we note the following reply, in the *Lancet*, to one who writes to inquire more fully about slop diet:

The objects aimed at in giving slop

diet may be: 1. Depletion of the system by cutting off the supply of nitrogenous and combustible material. 2. The securing of rest to the digestive organs. 3. The avoidance of the ills which follow upon the taking of food upon which the digestive and assimilative organs are unable, through debility or actual disease, to exert their full function. Experience has shown that cutting off all food from healthy men causes death in about five days, and is attended with great suffering. If water alone be allowed, the suffering is very greatly lessened, and life can be prolonged for about the same number of weeks. The introduction of water entails no "work" upon the digestive or assimilative organs, and therefore it admirably fulfils the conditions of "slop diet," whether required for any one of the three objects mentioned above. It is therefore the best "slop diet," and we believe that as such it is not sufficiently appreciated by the profession. Saline solutions stand next in order of merit, requiring no "digestion," and undergoing little, if any, change when passing through the assimilative organs. Saccharine solutions must rank next; they are readily absorbed, but possessing distinct nutritive value, they are not so depletive as water, and, moreover, being liable to undergo fermentation in the alimentary canal, they do not afford such complete rest to that organ. They also have the disadvantage of being less palatable than the former. Decoctions of starch require distinct "digestion" and "assimilation," possess high nutritive value, if unabsorbed are liable to fermentation, and may leave a considerable residue of undigested matter to pass along the intestines. Solutions of albumen must be placed at the bottom of the list, as requiring digestion and assimilation, and as possessing the high-

est nutritive value, being "tissue-forming" as well as "force-producing."—*Med. & Surg. Reporter.*

Obstruction of the Bowels.

A case of obstruction of the bowels lasting eighteen days, was relieved by Dr. BOTLEY (*Le Progres Medical*), by means of electricity. Mme. H., aged 77, after a few days of constipation, was taken with complete obstruction, for the relief of which all ordinary methods were tried in vain, and the question of making an artificial anus was considered, as she daily became weaker with intense tympanitis and stercoraceous vomiting. It was decided, however, to try electricity first. On the 17th day an induction current was used, one pole in the rectum the other over the bowels for fifteen minutes; in the evening slight colic was felt, indicating the return of action in the bowels. Next day another application of electricity was made lasting only 12 minutes, on account of colicky pains produced by the current. A passage was effected next morning lasting two hours, consisting of at first hard masses, then soft, accompanied with intestinal gases.—*Weekly Med. Review.*

DISEASES OF THE URINARY ORGANS.

Remedies for Enuresis.

Dr. J. COOPERIDER, of Taylorsville, Ind., declares in reply to the request of a correspondent, as given in our last, that he has observed the best results to follow from the use of full doses of *rhus aromatica* in cases of enuresis, in which the cause did not lie in any congenital defect or surgical disease. This drug has within the past few years been very highly extolled as a remedy for this condition, although our individual ob-

servation of its effects have not been such as to give it pre-eminence. Doubtless when the incontinence is due to impaired velocity, this remedy, through its stimulating diuretic properties is beneficial.

Dr. Byron Thorp, of Matawan, Michigan, has found the following formula to answer well in his practice: *R.* Potassii bromidi, 3 ij.; ext. staphisagiri fluidi, 3 jss.; ol. cajuputi, 3 iij.; syrupi. qs ad., 3 jv. *M.* Sig. A teaspoonful every four hours for an adult; to be diminished for children.

In many cases the cause is of central nervous origin. In these the remedy can be discovered only through patient and persevering trial of the many nerve tonics or cerebro-spinal stimulants at our command. In some cases everything will fail until strychnia is given to secure its physiological effects; in others everything may be tried in vain until the bromide of potassium is administered in full doses; and again the whole list of drugs may be gone through without benefit, and the patient is cured by a persevering use of electricity. If it were possible in every case to determine its etiology, the selection of the remedy would, of course, be very much simplified. Unfortunately this is not always possible. In treating any given case it is necessary to pay attention to the general condition of the child, and usually liberal doses of the tincture of the chloride of iron and quinine will be required. With a view to stimulating the bladder, which is usually at fault in these cases, small doses of the tincture of cantharides may be combined. The general condition of the patient having been improved, if the enuresis still persists attention must be directed to the more direct cause, if happily it may be discovered. Belladonna is useful in allaying irritability of the bladder when

the cause is due to this, and when an atonic catarrhal condition exists the balsamic diuretics, such as buchu, copaiba, etc., are valuable. In this latter condition we believe rhus aromatica to be serviceable. A blister over the sacrum may sometimes be required, and lately Dr. Da Costa has reported good results from three-grain doses of chloral hydrate three times a day. It is, however, impossible to prescribe any remedy which shall promise uniformly successful results in the relief of the condition of which enuresis is the symptom, and the practitioner will often find his skill and perseverance sorely taxed to effect a cure.

Cauterization of the urethra for half an inch from the meatus, by means of a piece of lunar caustic, has the endorsement of high authority, in obstinate cases.—*Med. Age.*

Cider as a Preventive of Stone.

Is attracting attention in France. Dr. DENNIS DUMONT examined the records of the Caen hospital, and found that in fifty-nine years only four cases of stones in the bladder were admitted. He attributes this immunity to the fact that the residents of the country are cider drinkers, which beverage is a decided diuretic. Enquiry showed that the residents of other cider drinking districts enjoy the same immunity from stone.—*Weekly Med. Review.*

DISEASES OF RESPIRATORY ORGANS.

Quebracho in Dyspnœa.

Professor DA COSTA has had some very satisfactory results from the treatment of dyspnœa by quebracho. In a recent lecture he said that in his experience it had been especially serviceable

in two classes of cases: (1) in purely nervous asthma he had found it to be invaluable: (2) in cases which have been rather loosely called cardiac asthma, cases in which a heart lesion has produced failure of cardiac contraction and consequent congestion of the lungs, he had also known it to be very useful. It may serve as a cardiac tonic, or may do good solely by its action upon the respiratory centre in the medulla. Whatever may be the explanation, however, it gives wonderful relief in appropriate cases. The way in which he gives it is the fluid extract in doses of twenty minims every hour, gradually increasing the amount, some patients requiring as much as a drachm before relief is obtained. The good effects are observed usually after two or three doses have been taken. The taste is well covered by using equal quantities of the French syrup of red orange and water as the vehicle. In this form it usually agrees with the stomach. As the respiratory symptoms are relieved the remedy may be given at longer intervals.

White's Cough Syrup.

Syr. tolutani, \mathfrak{z} ij; glycerini, \mathfrak{z} iv; syr. scillæ comp., \mathfrak{z} vi.; syr. ipecacuanhæ, \mathfrak{z} vi; tr. lobelia \mathfrak{z} vi.; tr. opii camph., \mathfrak{z} vi.; ext. pilocarpi fl, \mathfrak{z} ij.; ammonii chloridi, \mathfrak{z} i. M. Take a teaspoonful three times during the day, and every hour or two before going to bed.
---*Med World.*

Excelsior Cough Syrup.

Morphine, 8 grains; tartar emetic, 4 grains; fluid extract ipecac, 90 minims; tincture sanguinaria, 1 ounce; water six ounces. Syrup sufficient to make two pints. Heat the water, add the morphine and tartar emetic, stir until solved and add the syrup cold; shake

and to this mixture add the fluid extract of ipecac. and the tincture of sanguinaria; shake, and fill the bottles of size to suit. If prepared after this formula this syrup gives entire satisfaction. Dose for adults, one teaspoonful three times daily, and after each fit of coughing. For children in proportion to age.—*Med. Bulletin.*

Effect of the Atmosphere on the Voice.

Our English exchanges inform us that Dr. MOFFAT delivered a lecture lately in Glasgow, on voice training by chemical means. Dr. Moffat maintained that the presence of peroxide of hydrogen in the air and dew of Italy had some connection with the beauty of the Italian vocal tone. A series of illustrations by people taken from the audience, who inhaled a chemical compound made to represent Italian air, were largely satisfactory—a full, clear, rich, mellow tone being produced by one application. Several gentlemen present gave their favorable opinion of the new idea. Dr. Moffat's own illustrations were quite unique. Taking what was originally a voice of power and resonance but destitute of intonation, he showed by chemical means this could be a tenor of great range. Some twenty notes, ranging from the lower to the higher register, were sung without any effort by the possessor of a voice of this character.

Guaiac in the Treatment of Acute Sore Throat.

In a recent paper read before the Philadelphia Laryngeal Society, Dr. JOSEPH B. POTTS-DAMER speaks highly of the action of the tincture of guaiac in tonsillitis and pharyngitis. He reviews the opinions of the various authorities on this use of the drug, and finds that by many of the leading writers on the-

rapeutics it is not even mentioned, while others refer to it in terms of no very high praise. Phillips endorses its use very emphatically, declaring that given in half drachm doses (the tincture), every four hours, it appears to abate the inflammation and to cut short the disease in a remarkable manner. Morell Mackenzie and J. Solis Cohen warmly endorse its action. Dr. P. was first led to employ this treatment in 1879, after he had a succession of trials of it in his own case. In the winter of that year he was subject to attacks of sore throat, which he found were promptly aborted by the use of the tincture of guaiac, thus strongly corroborating Mackenzie's dictum, that "we have in guaiac a remedy which, if administered at the onset of the attack will almost always cut short the crescent inflammation."

The practical deductions which Dr. P. draws from the cases which have been under his treatment, are : 1. The almost instantaneous relief from pain. 2. The improvement in deglutition which always accompanies this relief. 3. The early diminution of the swelling. 4. The short course of the disease, all of the cases having been practically well on the fourth day of treatment, if not sooner. 5. If the case comes under the treatment early enough the disease may be aborted.

Even if we agree with Trousseau and others in admitting that the disease must run its natural course, we have no right, says Dr. P., to act supinely, as by the use of guaiacum we certainly ameliorate, and as he believes, cut short the disease.—*Therapeutic Gazette*.

Greasote in Diseases of Air Passages.

Dr. Pick, of Coblenz, says (*Deutsche Med. Wochensch.*), that the action of creasote in consumption, recently much extolled by the French (Bouchart and

Gimbert), as well as the successful experiments of Frantzel and Curschmann, induced him to employ this much discredited remedy in a series of cases, and to make a summary of the results. Creasote was given by the author both internally and externally. For external use he employed a mask which, being a modification of Hausmann's apparatus, could be worn by the patients without much difficulty, and even during the night. The creasote was dropped on cotton-wool in the mouthpiece, and was inhaled by means of deep inspiration. The apparatus has the advantage over Hausmann's that the nose remains free, and the troublesome irritation of the nasal mucous membrane is avoided. Dr. Pick gave the creasote internally either with cod liver oil, or according to the French formula: Kreasoti, 13.00, tinct. gent., 30, spirit. vini rectific. ad., 250, vini Malag. ad., 1,000. The drug was well borne by the patients both internally and in the form of inhalation, and Dr. Pick speaks of one case where there was a decided antipathy to cod-liver oil, but where it was taken quite well in the above-mentioned combination. Gastric disturbances or toxic effects were seldom perceived. Among the cases treated by the author was one of croupous pneumonia passing into gangrene, thirteen of tuberculous infiltration in persons with hereditary taint, and one of sudden hæmoptysis after long-standing catarrh of the lung. The results were very good in all sixteen cases; after a short use of the drug, diminution of the cough, considerable reduction of temperature, improvement of the general health, and decrease in the expectoration quickly ensued; and the hæmoptysis mentioned above, which had not yielded to a fourteen days' treatment with ergatin, was speedily checked by a few hours' inhalation of

creasote. This may, perhaps, be attributed to the styptic action of the creasote, which, besides its disinfecting and antipyretic properties, coagulates albumen and contracts the capillaries. A lasting effect was, however, observed to follow the employment of creasote only in catarrh of the apex, or in commencing infiltration. In advanced phthisis, where extensive disintegration of tissue with great diminution of strength was already present, the only lasting result was the alleviation of isolated symptoms. Dr. Pick lays particular stress on the quality of the creasote, and attributes its actions only to that got from beech-wood tar, in contradistinction to the kind more frequent in commerce, obtained from coal-tar, whose qualities, so far from being useful, only set up gastric disturbance.—*Med. & Surg. Reporter.*

Eucalyptus in Pulmonary Gangrene.

Extreme fœtidity of breath, cough, dyspnœa, and fever, with dullness in a definite location, tubular respiration and crepitant râles, and black and very offensive sputa, caused Dr. BONAMY (*Le Courier Méd.*), to diagnose pulmonary gangrene. The patient was first put upon a mixture containing carbolic acid, but no improvement following, this was replaced by tincture of eucalyptus. In two days after the last prescription, the odor of the breath was much less offensive, and in less than two weeks the patient was cured.—*Ibid.*

An Inhalation for Catarrh, Coryza, Asthma, etc.

M. ST. MARTIN recommends this formula in the *Jour. de Méd. Paris*. Acid carbolic, 5 parts; ammon. pur. liq., 7 parts; aquæ dest., 10 parts; alcohol, 15 parts. Soak some cotton-wool

with this mixture, and breathe this vapor from a wide-mouthed bottle.—*Ibid.*

The Climatic Treatment of Phthisis.

In a paper on this subject, read before the Ulster Medical Society, Dr. JAMES ALEX. LINDSAY says there are several cases in which the climatic treatment is plainly inadmissible.

1. In acute tuberculosis. Here no treatment is of even temporary avail, and the rapid prostration of the patient makes a resort to travel quite out of the question.

2. During acute exacerbations of the chronic malady. Here the wise treatment is to avoid all causes of excitement and irritation, to soothe the patient, and to wait until the disease shall again resume its chronic character.

3. Where the patient's means are insufficient to enable him to travel with reasonable comfort, or where there is an idiosyncrasy which renders travel peculiarly distasteful and irritating.

In regard to favorable cases :

1. Those which approach the remittent type are peculiarly favorable for climatic treatment.

2. The milder constitutional symptoms are, in proportion to the local pulmonary mischief, the more hopeful is the climatic treatment, and *vice versa*.

3. It is important to inquire whether resort has ever before been had to travel, and with what results. Patients who are braced and stimulated by change of scene, and who possess much mental elasticity, are more likely to gain advantage than those who are depressed and disheartened by absence from home and the association of friends.—*Dublin Journal of Med. Sci.*—*Med. Med. Jour.*

CONSTITUTIONAL DISEASES.

The Treatment of Typhoid Fever.

Dr. S. K. JACKSON (*Med. Times*): The author contended that the discussion of this subject, though trite and hackneyed, could not be considered as finished until there was a better agreement among physicians as to the treatment of this disease, or until the mortality occasioned by it was much reduced.

The object of the paper was to point out a line of treatment suggested by a recognition of some pathological conditions long since known to exist, but which had been ignored in looking for indications for treatment. That these conditions have been overlooked is evidenced by the many and conflicting modes of treatment that have at different times been proposed, means not only not called for, but actually injurious. Some of these were enumerated to show that the pathology of the disease could never have suggested them. While all this conflict was being urged, the doctor declared that he had been pursuing one plan of treatment for 35 years, from which he had no reason to deviate, and that it did not contain one of the long list of means to which he had previously referred and which are generally employed in the treatment of this disease. He was reluctant to state the result of that treatment, but left each one to determine its value for himself.

Among the first and most prominent pathological conditions which had attracted the attention of the author was the nitrogenous waste, the diminution of fibrine, the deficiency of urea and of all the nitrogenous excretions. The fact that they are not excreted is no proof that they are retained in the system, for if they were there would be signs of uræmic poisoning, which no one claims

to have seen. They are not excreted, because there are none to be thrown off. One cause of the nitrogenous deficiency is the inability to digest nitrogenous food, which is owing to the absence of the digestive fluid, and this cannot be secreted because of the congested and inflamed condition of the glands and glandular follicles whose duty it is to secrete these juices. Another possible but not probable cause is the consumption of nitrogen by the parasitic organism, which is the acknowledged etiological factor in the production of enteric fever. That the parasite is a nitrogen-feeder, is proved by the fact that it lives and thrives in nitrogenous matters, in urea and all nitrogenous excreta. Old logs, rotten wood, and leaf-mould, saturated with these excretions, have been known to be fruitful sources of this fever. If further proof be needed, it is found in the ammoniacal exhalation from a typhoid fever patient from his breath, his skin and his urine. These exhalations are undoubtedly due to the decomposition of the nitrogenous constituents caused by this micro-organism.

This pathological condition furnishes the most important indication in the treatment of this disease. As this nitrogenous waste cannot be supplied by nitrogenous food, the author knew no way of accomplishing this object but by the free administration of ammonia, even to saturation. Fortunately this nitrogenous base furnishes us with salts of such different therapeutical powers as to enable us to select any one suited to any stage of the disease and to any condition of the system. We have in the nitrate of that base the most sedative salt that we possess, and in the carbonate the most stimulating salt of the *materia medica*. The nitrate of ammonia is capable of reducing the typhoid fever

heat down to 102° F., and of keeping it there. As this is not a dangerous degree, the patient is safe so long as it can be maintained. Ten or twelve grains of the salt every two hours is sufficient for this purpose.

As the disease progresses, and there is less need for a sedative, or if diarrhœa supervenes, the acetate of ammonia is substituted for the nitrate, and acetate of lead and opium are at the same time administered.

If nervous symptoms show themselves with a failure of the vital powers, the carbonate of ammonia in combination with potassium chlorate is resorted to; but if coma develops, recourse is had to the hydrochlorate of ammonia, generally in five grain doses, every two hours. The effect of this is magical. The doctor stated that he had never seen coma in a case which had been treated from the beginning with this ammoniacal course, and had only seen it in badly nursed cases, or in those treated by other means.

He considered the delirium of typhoid fever to be due to deficient nourishment, a delirium of starvation. It never fails to become quieted in a few hours after the free administration of ammonia. Wandering sometimes occurs if the dose is too small or the intervals between are too long. Patients sometimes ask to have the interval shortened on account of a confusion of intellect, which appears when the dose has been postponed too long.

For tympanites, turpentine is used by enema or by the mouth.

The pathological condition contended by some to exist in, and be the cause of coma, is a thickened condition of the envelopes of the blood corpuscles, on account of which the brain fails to be nourished, even though the blood contains the normal amount of

nourishment. This condition suggested the hydrochlorate of ammonia as a solvent for the thickened envelope; but whether this be its *modus operandi* or not, its effect is almost miraculous. Thus it will be seen that there is no stage of the disease in which one or other salt of ammonia is not used.

Why should cold baths and cold affusion be used when the temperature can be reduced by simpler and safer means and without the danger of reaction? The author long since abandoned quinine as not being the proper germicide for the typhoid-fever parasite. It is, however, the antidote *par excellence* for the malarial poison, but as the typhoid fever producing organism differs so essentially from that of malarial fever, it could not be expected that the same agent would destroy both. The parasite of malarial fever is a carbon-feeder, and that highly carbonaceous medicament, quinine, might be expected to be the best agent for destroying it, in accordance with the law (for which the doctor has been contending), viz., "that no organism can live in its own excreta, in the results of its life processes." If carbonic acid gas be thrown off as the excretory product of a life process, a saturation of that gas will check the process and destroy the life. If alcohol be the result, then alcohol is the proper agent to destroy the organism causing it. If sulphuretted hydrogen be evolved, then the compounds of sulphur are the most efficient means of checking the process. So then when ammonia is the excretory product, as in typhoid fever, ammonia, as has been shown, is the most efficient germicide. This furnishes us with an additional reason for employing the salts of ammonia, for this nitrogenous base not only supplies the nitrogenous waste but also destroys the vitality of the organism which causes it.

If this be a law, instead of accounting for the protection of the system against a second attack of contagious zymotic diseases by supposing that it is due to exhaustion of the pabulum necessary for the support of the parasite, why not attribute it to the infusion into the system of some excretory product which forever acts as a poison to the parasitic organism? This is the most probable explanation.

With regard to the period of this fever. If it is recognized as early as the third day, it may subside at the end of the first septenary, but if not recognized before the fourth or fifth day it cannot break before the end of the second septenary, but may at that time. If the treatment has not been inaugurated before the beginning of the second septenary the fever cannot be made to yield before the end of the third septenary (the 21st day). That it will yield on that day is almost an absolute certainty.

With regard to the diet, nothing is allowed but milk. Farinaceous preparations are never admissible. They cannot be digested for want of the fluids containing diastase. There cannot be any conversion of amylaceous food into dextrine or grape sugar, so then starchy food cannot be assimilated. If administered, they undergo a fermentation which adds to the gaseous distention and greatly complicates the case.

Animal broths are never allowed until the later stages of the disease, or until there are signs of the secretion of the digestive fluids.

In conclusion the doctor said, "The limited time allowed for this paper has compelled merely an outline of a subject which deserves full discussion. It is left to the profession to test the value of the treatment which has been detailed."—*Maryland Med. Jour.*

The Etiology of Typhoid Fever.

Dr. J. R. RYLEY (*Australian Medical Journal*) gives as reasons for regarding the poisons of typhoid and malarial fevers nearly related, the following: 1. The absence of any contagion or specific poison, or poison produced by feculent or other animal matters, the country being occupied by Europeans for the first time. 2. The presence of the malarial poisons, as evidenced by the presence of diseases universally acknowledged to be of malarial origin. 3. The remarkable proclivity to this disease exhibited by recent arrivals. 4. The occurrence of the fever all over the district, and not from any centre or centres of infection, and especially after hot weather followed by rain. 5. The occurrence of the fever where the soil was exposed to solar and atmospheric influence, by the cutting down of the jungle as well as the upturning of the virgin soil, composed almost entirely of decaying vegetable matter. 6. The appearance of this fever on nearly every new gold-field, such as Forbes, Grenfell, Gulgong, etc., when virgin soil was turned up, and, as in Westland, not so much among the inhabitants of the towns as amongst the mining population, working in and camping on the claims. This fact was observed also during the late Zulu and Afghan campaigns, as well as during the American civil war. 7. The disappearance of the disease under the influence of acclimatization and settlement, rather than from improved sanitary conditions. 8. The well-known fact that some malarial soils, innocuous during hot and dry weather, become dangerous after a shower of rain. Any old Australian gold digger will tell you that he can "smell fever poison" under such circumstances. 9. Last, not least, the enlargement and softening of the

spleen observed after death in every case of death from typhoid that occurred in Westland. He also says: "In the whole of my large experience I never saw an instance of this fever spreading by contagion, and I much doubt whether there can be produced a single well authenticated case of such a mode of propagation in these colonies."

Intermittent Fever.

The following is an extract from a clinical lecture by Prof. ROBERT BARTHOLOW, published in *Col. & Clin. Record*: This little girl has had attacks which the mother supposed to be sick headache. They have occurred periodically, but of late have been increasing in frequency. On inquiry we learn that the attacks began with chilly sensations and often with a decided chill. This was followed by violent fever and headache and terminated in sweating. With the commencement of chilly sensations there appeared nausea, violent vomiting and distress of the stomach.

Looking at the phenomena presented by this history, there is no difficulty in making the diagnosis. The child lives in a malarial part of the city. The attacks begin with a chill, followed by high fever, and terminate in sweating. The frequent recurrences of the seizures, and their persistence, indicates the existence of changes in the condition of the spleen and liver. In many examples of chronic malarial toxæmia the spleen is enlarged, but sometimes it is smaller than normal; in other words, in the most chronic cases the spleen is the seat of a chronic splenitis. The liver is also changed, being affected with pigment deposits and disorders of its circulation—the nutmeg liver. The paroxysms will recur as long as these

modifications in the condition of the liver and spleen are allowed to continue.

The question which we have to consider is, how to best arrest the attacks. As the gastric disturbance is so great, attention to the diet will be necessary. In order to prevent the occurrence of the paroxysm, quinine must be administered, in anticipation of the seizure. We must do something more than this. The condition of the liver and spleen must be taken into consideration, for although there is no enlargement of the area of dullness proper to these organs, I have no doubt that they are the seat of the changes which characterize chronic malarial toxæmia. The spleen in these cases is not necessarily enlarged, and may, indeed, as already stated, be smaller than normal. The organ may be in the condition known to practical pathologists as the "fleshy spleen." This is a chronic alteration in which the trabeculæ are very much increased in amount, and the splenic pulp proportionately diminished. There is hypertrophy and hyperplasia of the connective tissue elements, and hence its fleshy appearance.

There are two remedies to influence the liver and spleen, which are especially valuable. The one is aqueous extract of ergot and the other is an iodide, especially iodide of ammonium. There is also a condition of anæmia for which remedies of the chalybeate group are indicated. The most appropriate one in the present instance is the arseniate of iron. The best results will be accomplished by giving quinine, to prevent the recurrent attacks, and the use of a pill, containing the following: \mathcal{R} . Extracti ergotæ, \mathfrak{Dj} .: ferri arseniat. gr. ss.; ammonia iodidi, \mathfrak{zj} . M. Ft. pil. No. xx. Sig.—Two pills three times a day. This prescription should be very persistently used. Under this

plan of treatment, we will see the paroxysm subside and the marked improvement take place in the general state.

Inoculation for Protection from Yellow Fever.

In a letter to the *Sanitary News* Dr. DOMINGOS FREIRE, of Rio Janeiro, states that he has "vaccinated four hundred and fifty persons, for the most part foreigners recently arrived. Freedom from yellow fever has been pronounced among those thus vaccinated, for they have passed through a quite severe epidemic, and only six deaths have occurred among the four hundred and fifty vaccinated persons, that is to say, less than two in a hundred, while more than a thousand deaths have occurred among the non-vaccinated—the mortality of the non-vaccinated sick being about thirty to forty per hundred." Barring the very evident flaw in the reasoning, it would appear that Dr. Freire had certainly very good reason for continuing his observations. It would be very interesting to know how long the effect of the inoculation persists, and what are its remote results.—*Med. Times*.

Quinine and Podophyllin Pills.

R. Quinia sulph, gr. 1; podophyllin, gr. 1-12; sach. lactis, gr. 1-22; ext. belladonna, gr. 1-6; ext. aloes soc. gr. 1. Make into one pill. In making these pills let the podophyllin be well triturated with the sugar-of-milk, and then with the quinine. They are useful dinner pills.—*Louisville Med. News*.

Quinine.

Ergotine given in doses of 16 grains will neutralize the cerebral effects of 15 grains of quinine. Tinuitus may be entirely avoided by combining these two remedies.—*Quinologist*.

Two Cases of Rheumatic Gout.

Dr. R. S. SENILS (*Weekly Med. Review*): Among the most unsatisfactory cases a physician is called upon to treat are those usually classed under the head of Rheumatism, but which are, perhaps, mainly due to an excess of uric acid, and would more probably be referred to gout.

Mr. R., æt, 38, presented himself, complaining of stiffness of muscles and joints all over his body, basilar headache, pain over upper lumbar region, frequent desire to urinate, though passing but few drops at a time, and that causing him some pain and leaving a burning sensation along the whole course of the urethra. The urine was cloudy and deposited a heavy precipitate. Examination of the urine showed great excess of uric acid and urates. He was a large meat consumer and used liquors moderately, taking little exercise. I ordered him to stop his meat diet, moderate his use of liquors, take regular exercise daily, and after applying dry cups over the regions of the kidneys, prescribed the Lithiated Hydrangea (Lambert's) 1 drachm 3 times daily, largely diluted with water.

The first two days he stated that his urine was increased in quantity, but was very cloudy, and deposited a copious sediment, though his headache and muscular stiffness, etc., had departed. Advised him to continue the medicine and take largely of mucilaginous drinks. To-day he says he is a "well man and feels ten years younger."

The second case was one of a similar nature in a man of 65, who complained of an irritable bladder, frequent desire to urinate, and pain along course of urethra following the act. Prescribed the Lithiated Hydrangea in 1 drachm doses every four hours, largely diluted, and

warned him to be careful about his diet. In one week's time he was urinating normally, and was to all appearances well.

Palatable Prescriptions.

Dr. JNO. L. DAVIS suggests the following as eligible formulæ for the prescription of certain drugs that are disagreeable or nauseous in taste :

1. *Bitter Drugs*.—The type of these is found among the cinchona bark alkaloids. The best formula for masking quinine he gives as follows : \mathcal{R} . Quiniæ sulphatis, \mathfrak{z} ss ; tr. aurant. cort. recent., \mathfrak{z} ij. ; ext. glycyrrhizæ fl., \mathfrak{z} vj. ; syr. simplicis, \mathfrak{z} j. M.

He also commends the "tasteless cinchonia" combination; suggested some years ago by Dr. Ashurst, viz. : \mathcal{R} . Cinchoninæ, gr. j. ; sach. lactis, grs. iv. ; sodæ bicarb., gr. 1-10.

The cinchona alkaloids and their salts may be given also advantageously in elixir of taraxacum. Finally, it may be said of these, as of all disagreeable medicines, that if taken very cold, or if a piece of ice be taken into the mouth immediately before the medicine, the unpleasant taste will be less marked.

2. *Salty and Metallic Drugs*.—A large class of unpalatable drugs is included under this head. Dr. Davis regards this as the pleasantest prescription containing iodide of potassium : \mathcal{R} . Potassii iodidi, \mathfrak{z} ij. ; tr. aurant. cort. recent., \mathfrak{z} ij. ; ext. glycyrrhizæ fl., \mathfrak{z} i. ; syr. simplicis, q. s. ad., \mathfrak{z} iij. For this combination, of which each teaspoonful contains five grains, Dr. Davis gives credit to Mr. J. H. Eichberg, druggist of the Cincinnati Hospital. The same vehicle may be used for exhibiting the bromides.

Iodide, or bromide of potassium, or salicylic acid, may be given in milk to the amount of ten grains in the ounce. He also refers to the method proposed

by Dr. Seguin, of administering these remedies in slightly alkaline carbonated water, either natural or artificial. Magnesium sulphate, which is so disagreeable to many people, may be given very pleasantly in the following formula : \mathcal{R} . Magnes. sulph., \mathfrak{z} ij. ; acidi sulph., gtt. v. ; glycerinæ ; aquæ, \mathfrak{aa} \mathfrak{z} i. M. Half of this in a glass of water constitutes a very agreeable dose. A drop or two of mint makes it more palatable to some tastes.

3. *Astringent Drugs*.—Tannin is a representative of this class of drugs. The disagreeable taste of these remedies may be materially improved by the addition of sugar of milk and aromatic powder. When alcohol is not objectionable, the following combination is recommended for the administration of salicylic acid : \mathcal{R} . Acidi salicylici, grs. viij. ; spir. vin. gallici, m. xl. ; syr. acaciæ ; syr. limonis, aa. m. x. M.

As Mr. Davis has not mentioned any combination of salicylic acid for administration when the alcohol would be objectionable, we suggest the following : \mathcal{R} . Acidi salicylici, grs. viiss. ; liq. ammon. acetat., m. xl. ; syr. zingibar, m. xx. M. This is one dose.

For the administration of chloral he recommends either glycerine alone, or a mixture of that with the fluid extract of licorice : \mathcal{R} . Chloral hydratis, grs. v. ; glycerinæ, \mathfrak{z} j. M. Sig.—One dose. Or, \mathcal{R} . Chloral hydrat., \mathfrak{z} j. ; glycerinæ, \mathfrak{z} ij. ; ext. glycyrrhiz., fl., \mathfrak{z} j. M. The same vehicles may be used in giving croton chloral. Syrup of raspberry is also recommended, one drachm covering the taste of three or four grains of chloral.

4. *Ethereal Drugs*.—Syrup of raspberry will mask the unpleasant taste of sweet spirits of nitre. Sulphuric ether is best administered on a lump of sugar; chloroform in an emulsion, or with large quantities of simple elixir.

5. *Odorous Drugs*.—Carbolic acid is fairly hidden by simple elixir, five drops to the ounce. Creosote may be given with the elixir, or with syrup and wine. The best combinations for deodorizing iodoform are the following, in his opinion: R. Iodoformi, 3 j.; nitro-benzol, gtt. iij. M. R. Iodoformi, 3 j.; ol. myristicæ, gtt. ij. M. R. Iodoformi, 3 j.; eucalyptol, gtt. iv. M.

6. *Oils*.—Castor oil is most easily given with an equal amount of glycerine and a drop of oil of cinnamon to the ounce. [It is claimed that the addition of glycerine not only makes it more palatable, but also more efficient.]

One of the easiest ways of administering cod-liver oil, is with the yellow of an egg, a drop or two of an essential oil, and half a glass of sweetened water.—*Cinn. Lancet and Clinic*.

Sulphide of Calcium to Prevent Suppuration in Small-pox and Chicken-pox.

Surgeon-Major C. J. Peters, of the British army in India, *Indian Med. Gaz.*, relates a number of cases in which he succeeded in preventing the suppuration of the cutaneous lesions, and therefore the secondary fever, of small-pox, some years ago, by the local use of a mixture of the pentasulphide and the hyposulphide of calcium (commonly called sulphide of calcium), prepared by boiling a quarter of a pound of quicklime and half a pound of sulphur in five imperial pints of water until the liquid was reduced to three pints in measurement, when it was filtered and kept in glass-stoppered bottles. If ordinary well or river water is used, a white precipitate is liable to form in three or four days, while the solution loses its color and is no longer efficacious; it should therefore be freshly prepared, in quantities

only sufficient for three or four days' use. It is applied to the affected parts two or three times a day, with a feather, taking care that none of it gets into the eyes. As a rule, the pocks thus treated did not suppurate, but withered in the course of three or four days. The author believes that the lotion acts by destroying the germs of the disease, preventing suppuration, and guarding against the complications that result from blood-poisoning. He would now combine its use with the internal employment of the drug.—*N. Y. Med. Jour.*

Bichloride of Mercury in Diphtheria and Group.

Dr. WILLIAM M. THALLON contributes two articles on this subject to the *N. Y. Med. Jour.* Dr. Pepper, of this city, is a great advocate of this treatment. He uses it in large doses, with the following rules to guide him: If the false membrane is increasing, he increases the drug; if it is stationary, he maintains the same dose; if it is decreasing, he diminishes the remedy, and if the membrane has disappeared, he at once stops the bichloride.

He has found it convenient to have two standard formulas, according as he wishes to combine iron with the mercury or not. He generally writes for a three-ounce mixture, with half a grain of the bichloride, so that each teaspoonful contains about one-fortieth of a grain. The following are his prescription models:

Formula 1.—℞. Hydrargyr. bichlor., gr. ss; tinct. ferri. chlor., f. 3 iij; glycerin., f. 3 ss; aquæ, q.s. ad. f. 5 iij. M. Sig. f. 3 j. as directed, in water. Formula 2.—℞. Hydrargyr. bichlor., gr. ss; vin pepsin., elixir bismuthi, aa 5 iss. M. Sig. f. 3 j, as directed, in water.

The second formula is the pleasantest

way of prescribing the remedy, and it is the one used by Dr. Pepper.

Practically, he now generally begins with the second formula, and, when convalescence has commenced, resorts to No. 1 to get the benefit of the iron.

He does not attempt to explain the action of the bichloride; but bases his claim that it will give better results than other treatment known at present, entirely on clinical evidence. An important point is that the drug should be well diluted, whereby its irritating properties are avoided.—*Med. & Surg. Reporter*.

Statistics of Diphtheria.

The *Med. Times & Gaz.* tells us that M. FLORIND supplies to the *Rèvue Mensuelle des Maladies de l'Enfance* some interesting statistics relating to the cases of diphtheria, admitted to the Hôpital Trousseau, in Paris, during 1883. There were 606 cases of diphtheria admitted, of which 165 were pharyngeal, while 441 affected the larynx, or air-passages. Amongst the 165 cases of pharyngeal diphtheria there were 65 deaths, making a mortality of nearly 40 per cent. The 65 deaths included ten from paralysis, the rest dying from the toxic effects of the disease, or of measles or scarlet fever. Of the 441 diphtheritic croups, 359 were operated upon, with 244 deaths, a mortality of 68 per cent. The 359 cases operated upon, included 40 cases of croup complicating measles, and 30 who were under two years of age; and among those who recovered after tracheotomy there was an infant of thirteen months, three under twenty months, and two which were complicated with measles. The cases which were not operated upon were for the most part those cases in which there was wide-spread diphtheria of both pharynx

and larynx, and which were moribund when admitted. These results are said to be the most satisfactory which have been obtained for many years at the Hôpital Trousseau. It is interesting to note that several cases of paralysis occurred after *laryngeal* diphtheria, thus pointing strongly to the identity of pharyngeal diphtheria and "membranous croup."—*Ibid.*

A Year's Experience in Tracheotomy.

GEORGE M. GAY, M. D., writes, in the *Boston Medical and Surgical Journal*: During the year 1883 I performed tracheotomy twenty-one times for croup. Eleven patients recovered. All but one, a fatal case, were treated in the City Hospital. The cases were not selected, every one coming under our charge being operated upon if requiring it.

Many of the patients had diphtheritic croup, a few membranous, and, occasionally, it was not easy to make an exact diagnosis. Cases presenting enlarged glands and a nasal discharge early in the disease were undoubtedly diphtheritic. On the contrary, cases beginning as an ordinary cold, with no membrane visible in the fauces, no septic symptoms, but having a severe and constant dyspnœa, were called membranous croup. It is not of the utmost importance that much time be spent in discussing the difference between the two varieties of croup, considering the fact that both are extremely dangerous to life, and that both demand essentially the same treatment. Suffice it to say, that all of the cases presented severe and continued dyspnœa, due to an acute laryngeal obstruction of from one to five days' duration.

One patient was twenty-four years (died); the age of the others varied from eleven months to nine years; a

majority were four or five years old. The youngest who recovered was three.

The duration of the disease at the time of the operation ranged from one to eight days; the dyspnœa from one to five days. As a rule, the shorter the period of obstructed respiration the more favorable the result.

No ether was used in eight cases, and only a few whiffs in the others; merely enough being given to partially control the struggling and fright. Generally, the patient had rallied from the anesthetic before the tube was secured in its place.

Two children died of shock and septicemia a few hours after the operation; the other fatal cases survived from two to five days. None died from hemorrhage. Death resulted from either bronchitis or blood-poisoning. Every case but one derived more or less temporary relief from opening the trachea, and, so far as I know, no life was shortened by the operation. The upper rings of the trachea were usually incised, and also the isthmus of the thyroid, if necessary. In a baby lately operated on at the age of nine months the cricoid cartilage was divided with the result of greatly facilitating the introduction of the tube.

Venous hemorrhage was quite free in many cases, but no trouble was ever experienced from blood getting into the bronchi. By inserting a tenaculum or hook into the trachea just below the cricoid cartilage and lifting it up the windpipe is under control, and it is not necessary that the rings be exposed before they are divided. At all events I have not found it to be so in many of my later operations. Beginners, however, had better see the rings before they cut them. The tube having been secured by tape, a piece of cotton flannel spread with cosmoline is placed be-

tween the plate and the skin to prevent irritation.

After Treatment: Milk, ice-cream and beef-tea were the favorite articles of food. Nourishment was also administered by the rectum. Alcohol was never given unless the patient exhibited symptoms of marked exhaustion, when champagne was added to the diet. Several of the successful cases received no liquor during the treatment. Quinine and aromatic spirits of ammonia were given in every instance, while iron and chlorate of potash were not resorted to.

Next to nourishment I consider *steam* to be the most important part of the treatment. It is conducted from the radiator through a rubber tube, and directed upon the neck of the patient. The vapor is warm, moist, and does not condense in sufficient quantity to saturate the clothing. Atomized or medicated liquids are not used at present. Lime-water often produced a disagreeable erythema of the face, and thinking that possibly it might act as an irritant to the air passages, pure steam was substituted, and so far it seems to act as favorably as did any of the sprays formerly in vogue.

In all cases the patient received steam half the time, while to the more serious it was constantly supplied. The very great benefit derived from breathing the warm vapors was demonstrated beyond a doubt in many instances. Under its use the secretion would soften, the respiration would become easier, the child would become quiet, and fall asleep. The importance of a constant and generous supply of steam cannot be overestimated in this affection.

In the favorable cases the tube was worn from six to fifteen days; the average time being nine days and a half. I have found the most satisfactory way of getting rid of the tube to be as follows:

At the end of a week, if the respiration is free, the tube is taken out quietly, and the child is let alone. No trials are made to see if he can breathe through his mouth. As the tracheal wound contracts natural breathing through the larynx is gradually restored. With one exception this plan has worked well. In the case of a little girl, after the tube had been taken out, occasional attacks of dyspnoea would come on, which were relieved by the nurse's opening the wound with the dilator, and turning on more steam. The child soon learned to call for this instrument whenever she felt an attack approaching. The use of the tube was not again resorted to, and in a few days the dyspnoea ceased and the patient recovered.

I cannot close this paper without calling attention to the importance of having intelligent, skillful and devoted nurses in charge of these patients. Two sets are necessary, one for the day and another for the night, and they should have received special instruction in taking care of the tube, and also in removing or replacing it in an emergency. I cannot but feel that my success during the past year was due in no small measure to the admirable care which the patients received from the nurses of the hospital training.—*Louisville Med. News.*

Rheumatism.

Prof. Gross says rheumatism is a more common cause of ganglion than a blow or hard work is. At the clinic he treats it by subcutaneous puncture, and condemns the venerable practice of treating it by a blow from a book or hammer.—*Col. & Clin. Review.*

DIGESTIVE TRACT.

Treatment of Pruritus Ani.

Dr. J. B. JOHNSON (*Med. and Surg. Reporter*).

The causes of pruritus ani are either general or local. Sometimes the cause is entirely local; but most frequently it is both general and local. These causes should be, if possible, ascertained. The patient should be instructed to wash his anus well with a cloth wet with cold water immediately after each action of the bowels—this cleanliness is an exceedingly important agent in the treatment of the disease—and after so washing and drying himself, to bathe his anus well with the following: *R.* Hyposulphite of soda, 3 j; carbolic acid, grs. x; glycerine, 3 j; aqua distil., 3 vij. *M.* For a lotion.

Whenever the itching returns the application of the lotion is to be repeated and continued until the disease is arrested. Sometimes a good result is obtained by dusting over the anus the following: *R.* Iodoform, 3 j; tannic acid, grs. x. *M.* For a powder. Use two or three times a day.

I have found an injection of two ounces of pulv. aloes (3 j. to the pint of boiling water), night and morning, with a teaspoonful or two, twice or thrice a day, for three or four days, of the following mixture, to be the most efficient in the removal of ascarides: *R.* Santonin, ʒj; pulv. jalap, ʒij; fld. ext. spigelia, ʒj; fld. ext. senna, ʒss; syrup sarsaparilla comp., ʒjss. *M.* Shake well. *Sig.* Dose, one to two teaspoonfuls three times a day, followed in a few days, if indicated, with suitable doses of mur. tinct. of iron in an infusion of quassia.

Hypodermic Injection of Anthelmintics.

Experimenting with santonate of sodium Dr. DUBOIS (*Allg. Med. Centr. Zeit.*, 1884, No. 1) made a hypodermic injection of sixteen grains of the drug in a dog. Shortly after, an immense quantity of seat worms were discharged by the bowel. Not a single untoward symptom, either general or local, followed this method. It would be desirable to have this procedure tried in a larger number of cases, certainly in the human being, for our present way of eliminating worms still leaves a great deal to be desired. Some of the anthelmintics have a miserable taste, or, to be effective, they have to be swallowed in larger, and again in others, in often-repeated doses. The subcutaneous method, if successful, would soon simplify matters and more exactly define the doses necessary, and the irritation of the intestinal canal would be avoided. There are many persons suffering from worms in our country; and many a reader may now have the chance of increasing his reputation and enriching our knowledge by determining the question raised.—*Ibid.*

For Jaundice.

When existing independent of any mechanical obstruction of the bile duct. No. 1. \mathcal{R} . Fld. ex. chionanthus, \mathfrak{z} i; glycerine, \mathfrak{z} i; aqua, \mathfrak{z} ij. Mix. Sig. Teaspoonful every four hours. No. 2. \mathcal{R} . Pot. acetat, \mathfrak{z} ss; salicylic acid, \mathfrak{z} ij; aqua menth. vir. to make \mathfrak{z} jv. Mix. Sig. Teaspoonful in half glass of water every four hours, alternated with No. 1. If diarrhoea exists with putrid discharges give creosote in glycerine. Avoid all spirituous drinks and saccharine and fatty food.

DISEASES OF THE URINARY ORGAN.

Vest Pocket Urinary Test Case.

By Dr. E.H. BARTLEY, of Brooklyn.—This case is designed to furnish in a compact form the means by which the physician can inform himself, at the bedside of the patient, as to the chief chemical and physical characters of the urine. It is the outgrowth of a want felt by the author, who has used such a case for 2 years.

The aim in presenting it in this form, is to provide the busy practitioner with a compact, durable, and serviceable case for testing for albumen, sugar, acidity, and sp. gr., while in the presence of the patient, with the symptoms before him, and before prescribing.

The case contains a scientifically correct urinometer enclosed in a cloth bag to prevent breakage, a heavy glass test tube serving as an urinometer jar and test tube, a package of litmus test papers, a pipette for convenience in handling the urine, and two vials to contain the test powders.

With these the following points may be determined at the bedside, viz: The quantity of urine passed, the color, transparency, reaction, specific gravity, total solids passed, and the presence or absence of sugar and albumen.

It should be remembered that the normal quantity passed in 24 hours is from 40 to 60 fluid ounces, of acid reaction, and a specific gravity (sp. gr.) of 1018–1020, the usual variations being 1015 to 1025.

Pathologically, the urine may be increased in diabetes, chronic interstitial nephritis, amyloid kidney, hysteria and convulsive conditions, and from excessive drinking of fluids.

It may be decreased in acute fevers, acute nephritis, deficient heart tonus, chronic parenchymatous nephritis, and in last stages of all forms of nephritis.

In acute diseases, there is a constant diminution in the quantity of urine until the height of the disease, when it remains nearly constant until convalescence begins, when it gradually increases to normal or even above normal.

Note the temperature in taking the sp. gr., which should be at about 60. The figures on the instrument are the last two figures of the sp. gr.

THE SPECIFIC GRAVITY OF URINE, to be of any value in diagnosis, must always include a knowledge of the quantity passed in 24 hours.

Physicians generally are not accustomed to make enough use of the sp.gr. in diagnosis. Hence, we introduce a few of the most important conclusions to be drawn from it.

1st. Urine of high sp. gr. (above 1025) but small in quantity and of high color, is indicative of a febrile condition (small amount of drink and free perspiration may cause a similar condition).

2nd. Urine of high sp. gr. with increased quantity indicates diabetes mellitus. Confirm by sugar test.

3rd. Urine of low sp. gr. with increased quantity may indicate diabetes insipidus, or hydruria.

4th. A small quantity, of low specific gravity, should be regarded with great caution; suspect uræmia, whether albumen be found or not.

The solids passed by the urine form an important aid in diagnosis of many conditions.

The quantity of solids passed by a healthy adult, in 24 hours, is from 60 to 70 grammes, or from 900 to 1100 grains, 1000 grains being an average.

The approximate quantity of solids passed in 24 hours may be found by multiplying the number of fluid ounces by the last two figures of the specific gravity, and the result will be the total solids in grains. This rule gives results a

little low (15 grs. too low at 1015; 20 grs. at 1020; and 25 grs. at 1025), but it is near enough for the purposes here indicated.

In diabetes mellitus and insipidus not only is the quantity of water increased, but the solids also are increased, while in hydruria, the solids remain normal while the liquid is increased.

For example, suppose a case where the quantity of urine is 120 oz. the sp. gr. 1015, with emaciation and debility. The solids are increased. ($120 \times 15 = 1800$ grs.) If sugar is absent it is a case of diabetes insipidus. If on the other hand the sp. gr. is 1008 then $120 \times 8 = 960$ grs. The liquid only is increased and a diagnosis of hydruria will be made.

Suppose a case where the urine is diminished to 25 oz. and the specific gravity is 1014. By calculation the solids are found to be 350 grs. or about one third the normal amount. There is a great deficiency in the activity of the kidney, and uræmia may be feared. If with this condition of the urine a trace, even, of albumen be found, the probability of renal disease is very strong.

When the sp. gr. is persistently below 1015, *suspect albumenuria*.

When the sp. gr. is persistently above 1028, with large quantity, *suspect sugar*.

When the sp. gr. is persistently above 1025, quantity not increased, color high, suspect fever.

The litmus papers turn red with acid urine and blue with alkaline. The urine may be alkaline from fixed alkalies, i. e. potassium and sodium carbonates, or from ammonium carbonate. The first renders the test paper permanently blue, while in the latter case the paper gradually changes back to red on drying it at a gentle heat.

Urine alkaline from fixed alkali may indicate:

1. Anæmia, chlorosis, exhaustion from overwork, care, anxiety, etc.

2. Functional derangement of the liver with diminished secretion of bile, dyspepsia, etc.

3. Some acute diseases, as typhus, scarlatina, etc.

4. Administration of acetates, tartrates, carbonates or bicarbonates of the alkalies or of certain foods containing them. Such urine is usually clear, though not always. Urine alkaline from ammonium carbonate almost always indicates cystic trouble, and is always turbid.

Two formulæ are suggested for use as a test for albumen :

Keep in the office two bottles, the one containing pulverized citric acid, and the other pulverized potassium ferrocyanide (yellow prussiate of potash). *The pocket reagents bottle is to be filled at intervals of about two weeks with approximately equal quantities of these powders and thoroughly mixed by shaking.* R. Potass. iodidi $2\frac{1}{2}$ parts ; Hydrarg. bichlor. 1 part ; Acid citrici. 5 parts.

Pulverize separately, mix and keep in stock at the office, from which the bottle is filled. When prepared according to these directions *these reagents leave nothing to be desired as to delicacy and certainty.*

To use, take about a drachm of the suspected urine and transfer to the test tube with the aid of the pipette. Then drop into this about two or three grains of either of the powders above mentioned. If albumen be present a white cloud of albumen will immediately appear at the bottom of the tube, which can be readily seen on slight agitation. If the urine is slightly clouded it is best to add the powder to a small quantity of water in the test tube, and dissolve it previous to the addition of the urine.

The urine is then added carefully with the pipette so that the two solutions do not mix. At the line of separation of the two liquids a zone of coagulated albumen will be seen, when it is present.

In working with the second formula, it is necessary to warm after precipitation, to see if the precipitate is permanent, as the alkaloids are precipitated by this reagent, but are soluble by heat.

Peptones are also precipitated by this test. I prefer the first formula, but it is not perfectly permanent when kept for a long time. It is advisable, therefore, to refill the bottle once in about two or three weeks from the *stock bottles kept at the office*. Its want of permanency, however, does not affect its delicacy as a test.

Formula. Indigo-carmin, 1 part ; Sodium carbonate, 20 parts. Mix the dry powders and rub in a mortar.

The indigo carmin is a sulphindigotate of sodium made as follows : Take pure indigo and rub into a thin, creamy paste with strong sulphuric acid ; and water in sufficient quantity to thoroughly dissolve the sulphate of indigo ; neutralize with carbonate of soda, filter, wash once with a solution of carbonate of sodium, dry, and then mix as above.

To use this powder a small quantity is put into about a drachm of the suspected urine, and this is then heated to boiling. If sugar be present, the color is changed to green, violet, red and finally yellow. On agitating this yellow liquid the colors reappear in the reversed order. In testing for traces of sugar, only sufficient of the powder should be added to give a faint blue color to the urine. This test is delicate, is not affected by any other ingredient likely to be found in urine, and is permanent.

DISEASES OF RESPIRATORY ORGANS

Jurgensen on Pneumonia.

The *Lancet* thus condenses a report of JURGENSEN'S remarks, made in a debate on pneumonia at the German Medical Congress, from the "Berliner Klinische Wochenschrift :"

"Dr. Jurgensen (Tubingen) opened a debate upon genuine pneumonia, remarking that not long since it was thought that the study of pneumonia was closed. It was considered as established that its cause was exposure to cold, its nature a local inflammation, its issue a crisis, and its treatment antiphlogosis, especially venesection. Laennec and Skoda by their research in physical examination, Rokitansky by his anatomical studies, and Diet in his opposition to venesection led the way to a conversion of opinion. Gradually another conception of the disease arose—viz., that in croupous pneumonia we had to do not with a local but with a general disease, which is mainly, but not solely, localized in the lungs. This conception must now be further extended to the admission that it is an infective disease. Ten years ago it was difficult to establish this ; but modern experimental pathology has come to its support, so that the old contention of cold being the sole cause of pneumonia bids fair to disappear, and Dr. Jurgensen did not believe that more than four per cent. of the cases could now be assigned to this cause. It has also been shown, contrary to former notions, that the weakly are more liable to be attacked than the strong ; that most cases occur between the ages of one and fourteen, and that those above the age of forty-five are twice as numerous as those between fourteen and forty-four years. As to atmospheric influences it had

been proved at least in Tubingen, that scanty rainfall increases and heavy rains hinder the development of the disease. From his experience he had traced a parallelism between pneumonia and enteric fever as regards their relation to the humidity of the soil. A further analogy between these diseases is to be found in the influence exerted on them by insanitary dwellings. He referred to Emmerich's discovery at Munich of the pneumonia micrococcus beneath the floors of a barrack, where the disease had much prevailed, and considered that much light had been cast in this direction on the pathogeny of the disease, as well as on its treatment. Whether pneumonia was contagious could not be stated with certainty. Dr. Flint was disposed to think so ; but in so widely spread a disease more direct evidence of its transference was required, since cases of supposed contagion might be referred to exposure to similar insanitary surroundings. Was the pneumonic virus single or multiple ? The answer to this question might be found in the study of the 'pneumonia coccus' and the results of its inoculation in animals. Clinically, the unity of the disease would seem to be established, and the occurrence of a typical case was not opposed to this any more than it was in the case of the specific fevers. It seemed likely that the virus circulates in the blood and is especially prone to settle in the lungs and pleura ; but under certain conditions it may manifest itself in other regions also. Nauwerk (Tubingen) had found in thirteen cases of pneumonia the 'cocci' of Friedlander in the kidneys, and Jurgensen in one case marked by cerebral symptoms, found them in the brain. Clinically he would group all cases into those (1) of general infection, (2) with cardiac lesion, and (3) with pulmonary

lesion predominating, although in the last instance the heart always suffers. Treatment then should be prophylactic, especially in improving the sanitary condition of the dwelling. Iodine had been strongly recommended as aborting the disease, but Jurgensen was not able to confirm this. Beyond such attempts to arrest the disease at its onset, treatment must be symptomatic; and numerous views were held as to the most appropriate means, all recognizing the importance of maintaining the force of the heart. Antipyretic measures were the best, for they also fulfilled this latter condition. In conclusion he summed up his thesis as follows: 1. Cold is rarely an exciting cause of pulmonary inflammation. 2. Strong individuals are less frequently attacked than the weakly. 3. Antiphlogosis in the old sense must be rejected."—*N. Y. Med. Jour.*

Vapor of Glycerine in Cough.

PROF. TRASTOUR (*Gaz. Med. de Nantes*) uses with great advantage the vapors of glycerine where and whenever there is a fatiguing and painful cough. He puts 50—60 grammes of glycerine in a porcelain cup, and evaporates it by means of an alcohol lamp. An enormous quantity of vapors are generated. These evaporations are very precious in phthisis and other diseases of the respiratory tract.

Phenic glycerine can be used when antiseptic vapors are required, now so much in vogue in the treatment of diphtheritic angina.—*St. Louis Med. & Surg. Journal.*

Blister for Cough.

Prof. JAMES TYSON, M. D., of the University of Pennsylvania, in the *Medical Times*, says: The very best medicine, and often the only one which

will accomplish the result, is a blister. We have now in our wards a case of consumption in which the cough was most troublesome for six or eight weeks, and cough medicines of all kinds had failed; but in twenty-four hours the symptom was relieved by a blister.

[Better than the blister, is this: R. Morph. acetat. gr. iij; Acidi hydrocy. dil. ʒj; Syr. tolu. ʒ iij. M. Ft. sol. S. A teaspoonful as often as cough demands. The medicine should be kept in a dark bottle well stoppered. Some cases will require more and some less morphia and prussic acid, but this is a benign remedy. The blister and croton oil are well for pain, but should be a last resort for cough. Where mucous secretion is deficient, iodide of potassium is the remedy. Where strength to raise the sputa is deficient, ammonia, alcohol, and coffee are the remedies.]—*Louisville Med. News.*

Chronic Bronchitis with Asthmatic Paroxysms.

Prof. BARTHOLOW recommends—Potassii iodide, gr. xx. Liq. potassi arsenitis gtt. ij. Mix. Take every four hours during the paroxysm, and in the intervals between the attacks, ammonii iodide gr. v-x.—*Med. Bulletin.*

Pulsating Empyema.

M. FÉRÉOL reported a case of pulsating empyema of the left side before Societe Medicale des Hopitaux. Resection of the ribs was practiced, and the patient recovered. The reporter attributes the pulsatile character in such effusions to the presence of a certain amount of gas in the chest, which transmits the cardiac motion, as in the drum of a registering apparatus; pulsating empyema, therefore, is an empyema with pneumothorax.—*Le Progrès Medical. Med. Times.*

Bright's Disease of Malarial Origin.

Dr. I. E. ATKINSON, of the University of Maryland, believing that this subject has not attracted the attention it deserves, has been led to study with reference to it all cases of malarial fever coming under his observation during the late summer and early fall of the past two years, at Bayview Asylum, and the result he gives in an able and elaborate paper which appears in the July number of *The American Journal of the Medical Sciences*. The conclusions which he reaches are as follows:

1. Transitory albuminuria is not uncommon in the course of malarial fevers, and is due to the intense visceral congestions characteristic of these affections. It only may endure throughout the height of the congestion, recurring with each return of this, or it may persist in the intervals, in which event a higher grade of congestion is attained, more nearly approaching a condition of acute inflammation.

2. In a proportion of cases, varying with locality and type of prevailing epidemic, or individual conditions, inflammation of the kidney occurs, accompanied by dropsy and the usual symptoms of nephritis.

3. The usual form of malarial nephritis is the tubal and diffuse variety. In this the inflammation seems to be most intense in the vicinity of the glomeruli.

4. Contracted kidney may occur as an advanced stage of malarial nephritis either from long continued or frequently repeated attacks of malarial fever, or from fibrotic changes such as may ultimately occur in ordinary tubal or diffuse nephritis. It is altogether improbable that this form of malarial renal disease ever occurs primarily as purely interstitial nephritis.

5. These changes may be induced by

any form of malarial fever, though they more commonly follow chronic intermittent fever.

6. The tendency of malarial inflammation of the kidney is toward recovery. But from the persistence of the impaludism or the intensity of the inflammation, structural changes may be produced that are characteristic of chronic Bright's disease, when the gravity of the affection will be as that from chronic Bright's disease from whatever cause.

7. Treatment should be directed primarily against the malarial intoxication, more especially in recent cases. A correction of this will often be followed by a complete, though often gradual, subsidence of the nephritis. Even in more chronic cases, the malarial factor in the process should definitely be destroyed if possible, after which the disease should be treated as ordinary Bright's disease.—*Md. Med. Jour.*

Hydrogen Peroxide as a Test for Pus in the Urine.

The addition of a few drops of hydrogen peroxide to a sample of urine containing pus, is said to cause an effervescence quite as active as that resulting from addition of hydrochloric acid to an alkaline carbonate. The effervescence continues until all the pus is destroyed, so that it cannot be detected under the microscope. Such being the case, the peroxide of hydrogen affords a most delicate test for pus in the urine, and one very easy of application.

•Blood in Urine.

Prof. DA COSTA mentions the diagnostic point noticed by Dr. Morris Longstreth, that in hæmaturia the blood corpuscles are round and of normal appearance when from the kidney, and are small, shriveled and broken up when from the bladder.—*Col. & Clin. Record.*

CONSTITUTIONAL DISEASES.

On the Treatment of Typhoid Fever.

Excerpts from a Clinical Lecture in *Med. News* by Prof. DUJARDIN-BEAUMETZ.

Affusions of cold water, or rather of sea-water, which was Currie's treatment of fevers, are no longer in use, and the cold lotions of which I have already spoken are far preferable. These lotions of cold water are decidedly antithermic in their action, as no one who has watched their effect can have failed to observe; the temperature falls appreciably under their use, especially if they are repeated several times a day. This heat-reducing power is, I well know, limited, and in certain grave cases of ileo-typhus these lotions do not suffice to bring down the temperature, and we must have recourse to more active means. I believe the refrigerant action of these lotions to be a secondary effect, the principal and dominant action being that which they exert on the vaso-motor functions of the cutaneous capillary net-work, functions so profoundly disturbed in typhoid fever, and which tend to become restored under the influence of these cold lavations or spongings.

This vaso-motor and revulsive action is much more energetic when the wet pack is used. The method is very simple; the patient, in a state of nudity, is wrapped from head to foot in a sheet or blanket wrung out of ice-cold water. It is well, as a preliminary step, to have a rubber blanket spread upon a mattress; over this you place the wet sheet, in which you wrap your patient. Liebermeister advises that this envelopment should be continued for ten minutes; for my part, I prefer a shorter duration of a minute or so, after which the

patient is taken from the wet sheet and removed to his bed. If I prefer wet wrappings of short duration, to the practice of Liebermeister, it is because I do not wish to obtain refrigeration from these envelopments, but only a *regulative modification* of the nervous system, and this effect will be the more marked, the shorter the duration of the cold application. This is, gentlemen, one of our most powerful modes of treatment in cases of typhoid fever of ataxic adynamic character, and you will derive great benefit from it. Foltz has recently added cold lavements to the refrigerant medication. These lavements of water at 50° F., lower the temperature of patients—in a feeble manner it is true—but still appreciably, and this is a fact worthy of being remembered. So whenever you have occasion to give enemata to typhoid patients, see to it that the water which you use is cold.

It is the sulphate of quinine that is most often employed; yet in Germany use is made of the hydrochlorate, and in France Jaccoud prescribes the bibromhydrate of quinine. These salts are administered in solution, or oftener in capsules; the pill form should be discarded, for it not seldom happens that on account of the state of the digestive tube, these pills pass through the intestinal canal unaltered. But the capital point, and it is this on which Liebermeister has insisted, is to give large doses; for example, you should make your patient take eight grains every fifteen minutes till half a drachm has been reached. Liebermeister often exceeds this quantity, and continues giving the small doses every quarter of an hour till from forty to sixty grains are administered, but in this country we generally stop at half a drachm.

The period of administration of these

massive doses has also a great importance. Liebermeister counsels to give the quinine between five and seven o'clock in the evening; Germain Sée prefers the morning; Jaccoud, with good reason, says that you should give it in the morning or evening, according to the effect which you desire to obtain. Do you wish, for instance, to procure a lowering of the evening temperature? give your quinine in the morning. Do you wish to obtain a matinal fall? give it in the evening. Liebermeister and Kaulich give one large full dose on one day only, and do not repeat the dose unless the temperature takes on again an ascending march. Jaccoud gives his salt of quinine in decreasing doses for three days. Sée administers it without interruption. I believe that the method by interruption has great advantages over the continuous employ of the medicament, and you ought to be guided in this regard by the thermometric curve.

Employed after this fashion, sulphate of quinine produces in typhoid patients a very pronounced depression of the pulse and temperature, which lasts often for two days, and when the thermal curve rises it does not attain as high a point as before the exhibition of the quinine. But this antipyretic action, obtained with such large doses of quinine, has certain disadvantages. In giving to the patient thirty, and often forty or more grains of quinine, you are likely to overstep the therapeutic effect, and obtain the toxic action on the brain and on the heart. Germain Sée and Rochefontaine affirm that this cardiac action is of a tonic kind, but Laborde, with much reason, maintains that it is dangerous in hearts with degenerated muscular fibre, and you know that the latter is a very common complication in the infectious diseases. Moreover (and this is an argument which I adduced in

the last discussion at the Academy), the typhoid patient is a bad subject for treatment, not only because absorption of medicines is difficult in consequence of the unhealthy state of the digestive tube and the lymphatic vessels, which originate there, but also because the functions of the kidney and the liver are notably compromised. In a former course of lectures I showed you the capital importance of the liver and of the kidney from the point of view of the action of medicines, and from all these considerations you see how easy it is, when drugging your typhoid patients, to exceed the therapeutic and obtain the toxic action of your remedial agents.

You ought always, gentlemen, to have these facts in mind when prescribing active medicines in large doses to your patients in this fever. And while recognizing the benefits of quinine medication, I believe that it is best to be very prudent in the administration of this alkaloid, and never to exceed the dose of thirty grains a day, and always to have care not to give this medicament continuously. Therefore, I much prefer, as an antipyretic, salicylic acid to quinine, because one obtains antithermic effects quite as powerful with the former, and in doses which entail less danger.

Salicylate of soda, salicylate of bismuth, and salicylic acid have severally been employed. Salicylate of soda is preferred by the greater part of German physicians, as producing less irritation of the alimentary canal than salicylic acid, and as being quite as good an antipyretic. I do not hold this opinion, and believe with Prof. Vulpian, supported as to this belief by numerous cases occurring in my hospital practice, that salicylic acid possesses—in equal dose—an antifebrile action far superior to that of salicylate of soda; and I am

as much a partisan of salicylic acid in the treatment of this fever as I am of the salicylates when it is a question of rheumatic fever. Salicylate of bismuth, which I was the first, I believe, to employ in therapeutics (not, indeed, in typhoid fever, but to combat the fetid diarrhœa of infancy), has been utilized by Vulpian in the treatment of dothi-enteritis. Guided by the idea—very just, indeed—that typhogenous virus develops especially in the last portion of the small intestine, Vulpian thought of this medicament, which seemed to him likely to reach without any alteration the diseased places in the intestine, and there combat, *in situ*, the development of the infectious organisms. But the results have not met his expectations; salicylate of bismuth has, indeed, lowered the temperature, but it has had no influence on the march of the disease. So, despite the more satisfying results which Desplats has obtained, this medication has not found much favor.

Salicylic acid should be administered in capsules, and in a dose not exceeding sixty grains, for more than this determines, especially in females, cerebral excitation, buzzing in the ears, and gastro-intestinal irritation. I, moreover, am always careful to give at the same time a little milk to mitigate the symptoms of the latter, and when I come to speak more particularly of the details of management of this fever, I shall tell you the rules which I follow in giving salicylic acid. In doses of from half a drachm to a drachm it lowers the temperature two or three degrees without much influencing the pulse. By not exceeding this quantity of the medicament, I have never observed any cardiac or nervous symptoms to follow. It is not so with the next antipyretic of which I shall speak, viz., carbolic acid.

Desplats, of Lille, was the first to found

the *phenic medication* of typhoid fever; the trials made previously by Pecholier, Tempesto and Skinner were not successful, by reason of the small doses given. Desplats gives phenic acid in lavements containing twenty to thirty grains, and gives three or four of these a day; these lavements should be retained so that the medicament may be absorbed. Phenic acid has a considerable antipyretic action, and for my part I have seen doses of less than half a drachm administered in lavements, produce a fall in the fever of nearly five degrees. Such an antipyretic action is not, however, produced without danger; it is, in fact, accompanied with profuse sweats, pallor of the integument, and often an alarming state of collapse.

Last year (in 1882) I often had recourse to carbolic lavements, and frequently observed pulmonary congestions in patients thus treated; in calling to mind the toxic effects noted in animals poisoned by phenic acid, where these pulmonary congestions are the rule, I attributed to my medication a certain part in the production of these thoracic complications, and discontinued the employ of these phenic lavements. Since then, at the Medical Society of the Hospitals, at the time of the discussion which followed the report of Ferrand on the method of Desplats, several of our colleagues, and in particular Sireday and Dreyfus Brissac, mentioned similar facts; therefore, gentlemen, while recognizing the powerful antipyretic action of phenic acid, this medication must be considered as dangerous, and when you have recourse to it you cannot exercise too great care and watchfulness. For my part, I think it should be abandoned altogether.

Resorcin has been little used in typhoid fever. You will see, when I come to speak of intermittent fever,

that it has been used to advantage in this fever, but although I have made many attempts to introduce this substance into the therapeutics of our country, I have not obtained any very positive effects from it in ileo-typhus. As for kairine, I am not aware of any definite results which have been obtained from it in this disease.

Typhoid Fever.

Carbolic acid is used in typhoid fever by Dr. F. W. WARFUNG, of Stockholm. He gives it in doses of about eight grains, twice a day, sometimes by mouth but generally by rectal injection (five-ounce solution for each dose). This agent reduces the temperature and produces abundant sweating. All the symptoms are ameliorated and the patient is much more comfortable. Dr. W. attributes these effects to the antiseptic, rather than the antipyretic action of the drug. He believes that it provokes a "transitory paralysis of the typhoid virus."—*Med. World*.

Arteritis as a Sequela of Enteric Fever.

An interesting communication on the above subject has been made to the *Revue de Médecine* (vide Nos. 1 and 2 for this year), by M. BARIE. The conclusions at which he arrives may be summed up as follows:—Acute arteritis after typhoid fever is especially liable to occur in the main arteries of the legs, and is generally uni-lateral. It comes on at the commencement of convalescence, just as the patient is beginning to walk again, and is as likely to follow a mild attack as a severe one. He makes out two forms, viz., acute obliterative arteritis, and acute parietal arteritis, but they differ only in degree. The former is the result of a cellular infiltration of all the coats of the artery with a rough-

ened state of the lining membrane; this is followed by the formation of a thrombus firmly adherent to the walls. If the obstruction is complete and there are no anastomoses, dry gangrene speedily makes its appearance. The chief symptoms and signs are pain along the course of the arteries, sometimes limited, at others extending the whole length of the limb, and increased by pressure or exertion; marked diminution in the fullness of the pulse wave; swelling of the affected limb without œdema or redness, but followed sometimes by a violent mottling; lowering of the temperature of the affected limb; and lastly the appearance of a hard and painful cord along the course of the artery. The parietal form is to be distinguished from the above by the general mildness of the symptoms, the absence of the cord-like swelling or dry gangrene, and by the fact that recovery always takes place. As to whether the symptoms might not be due to embolism, could only be decided by a careful examination of the heart, and a search for other signs of embolism. M. Barie is of opinion that typhoid arteritis results from two principal factors, viz., local and permanent irritation by parasitic and infectious germs, and profound disturbance of the vaso-motor nerve supply.—*Medical Times and Gazette*.

Inunction as a Febrifuge.

Dr. P. COLRAT, in a very interesting paper on modifications of temperature produced by general inunctions, especially in the febrile diseases of children ("Lyon méd.") recalls the celebrated experiment of Fourcault, reported to the Academy of Sciences in 1838, in which he proved that the application of an impermeable varnish to the skin of an animal caused a fall of temperature,

instead of causing it to rise, as would naturally be anticipated. Schlemann, of Hannover, was the first to apply the discovery to therapeutics, but limited it to the treatment of scarlatina; he believed that it diminished fever, quieted the patient, prevented complications, and diminished the chances of contagion. The treatment was soon generally adopted, and, although many did not believe that it had any influence in preventing complications, it was on all sides found to lower the temperature and diminish irritability. The author of this paper has employed inunctions in a large number of cases, and has arrived at the conclusion that they are of use in all febrile diseases, and that their use should not be limited to the eruptive fevers. He finds that the temperature begins to fall immediately after an inunction, and continues to fall for about an hour; it then remains stationary for about half an hour longer, when it commences to rise again. At the end of two hours it has reached the point where it stood before the inunction. The temperature again falls when a second or third inunction is performed, and may be kept down indefinitely by repeating them. The younger the child, the more marked the effect; the temperature may fall as much as three or four degrees. General inunctions have been so freely practiced that it is quite evident that they are without danger, and one finds it difficult to explain the famous case of the child who was gilded to personate the "golden age" at the inauguration of Leo X., and who died in consequence. Senator proposes to explain this case as due to poisoning from the solution of gold employed in the gilding. The fall of temperature which follows inunction has been explained by Laskiewitsch and Lomikowski as due to increased loss of warmth by

radiation. These experimenters proved that, if a limited portion of skin was covered with grease or varnished, a greater amount of heat was radiated from it than from an equal surface of bare skin. They further showed that, if animals were greased or varnished, they soon died from depression of temperature, the blood in the veins being arterial from non-use of the oxygen contained in it, this last being due to arrest of oxidation and tissue metamorphosis by low temperature. They then prepared other animals in the same way, and showed that they could be kept alive by covering them with cotton wadding, or by putting them in a very warm room, or resorting to any means which prevented the increased loss of body heat which followed the inunction. According to these experimenters, adults are less affected by inunction than children, because they present less surface in comparison with their weight, and are less profoundly affected by measures which increase their rate of heat radiation. Dogs and fur-clad animals die as a result of inunction, because they are naturally prevented by their coat from losing much heat by radiation; when, therefore, the non-conducting properties of their coat are neutralized by the application of ointments or varnish, the loss of warmth is increased so far beyond the normal that life can not continue. The idea that their death under these circumstances is due to asphyxia, from suppression of cutaneous respiration is opposed by the fact that the appearances post mortem are not at all those of asphyxia, the blood containing even more oxygen than normal, and even the venous blood being bright red because the cooling tissues did not use the oxygen that was offered them, but allowed it to pass on into the veins, as it does in syncope.

Warburg's Tincture.—Hints for Simplifying and Cheapering it.

DR. JOHN C. PETERS (*Medical Record*): Some time ago I was so impressed with the shrewd hints of *The Record* about Warburg's tincture that I have made a careful study of that complex preparation, which I hope will be instructive to its readers.

In the tincture 42 ounces of various ingredients are to be dissolved in 500 parts of proof spirit, which is about half alcohol and half water, by placing them in a water-bath for twelve hours, then expressing them and adding 10 ounces of disulphate of quinine, the whole mixture being replaced in the water-bath until all the quinine is dissolved.

The process seems simple, but it may safely be assumed that a great residuum of resinous, bitter and aromatic substances will be left behind.

Next to quinine the most important ingredient is aloes, of which 1 lb. British, or 16 ounces avordupois, or 7,000 grains, are to be dissolved in 500 ounces of proof spirit. There are next 4 ounces, or 1,750 grains, of rhubarb. Third, 4 ounces, or 1,750 grains, of angelica seeds, which is a simple aromatic tonic, spice, or stimulant, like aniseed, calamus, and the like. Fourth, 4 ounces, or 1,750 grains, of the so-called *confectio damocratis*, which is a mild confection of opium, which once contained sixty-two ingredients, with about 5 grains to the ounce, of opium. Nearly a century ago the London physicians substituted the *confectio Londonense*, made of opium, 6 drachms; long pepper, 1 ounce; ginger, 2 ounces; caraway seeds, 3 ounces; syrup, 1 pint. There is 1 grain of opium in every 36 grains, and the dose 10 to 30 grains. Hooper says: "To the credit of modern pharmacy this is almost the only confection of opium that now remains of all those compli-

cated and confused preparations called Damocratis, Mithridate, Theraic, etc. It more nearly approximates the virtues of all of them than any other, and may be considered an effectual substitute for them in practice. It is a very warm and stimulating confection and admirably calculated to soothe pain and restlessness, and sustain strength in low fevers." Fifth, 2 ounces, or 875 grains, of elecampane, or less than 2 grains to the ounce; all its virtue are due to a slightly peculiar camphor, which gives it its odor. Sixth, 2 ounces of saffron. Seventh, 2 ounces of fennel seeds. Eighth, 1 ounce, or less than 1 grain to the ounce, of gentian. Ninth, 1 ounce of zedoary, which is almost identical with ginger. Tenth, 1 ounce of cubebs. Eleventh, 1 ounce of myrrh. Twelfth, 1 ounce of camphor. Thirteenth, 1 ounce of boletus laricis, which is a purgative comparable to jalap and senna.

To sum up, in each ounce of Warburg's tincture we have about ten grains of quinine; fourteen of aloes; four of rhubarb; one of opium; two of elecampane; two of saffron; one of gentian; one of ginger; two of fennel seeds; one of cubebs; one of myrrh; one of camphor; and one of boletus, or jalap, or senna.

In building up this tincture, Warburg probably took a hint from the German and French so-called Paracelsian elixir of life, which is composed of aloes nine parts; gentian, rhubarb, zedoary, saffron, and boletus laricis, or larch, or purging agaric, each one part; digested in proof spirit two hundred parts, and of which the tonic and alterative dose is one or two drachms.

The European tincture of rhubarb is made with cardamon and coriander seeds, and saffron. The angelica seeds, fennel seeds, elecampane, saffron, zedoary, cubebs, and the little myrrh and

camphor are pleasant aromatic additions to the tincture; and the one grain of gentian, and one grain of boletus or jalap do not deserve a great deal of attention.

The question arises whether a few aloes and rhubarb pills with quinine and spices, will not accomplish almost all that Warburg's tincture will.

Or, if a liquid preparation is preferred, any physician can build a formula for himself with simple tincture of aloes and liquorice, U. S. P.; or tinct rhei et sennæ, U. S. P., made with rhubarb, senna, coriander and fennel seeds, aided by a little paregoric and compound tincture of gentian—the latter made with gentian, bitter orange peel and coriander seeds—which will complete the whole, unless one prefers to add a few drops of tincture of myrrh and fluid extract of cubebs.

Chlorate of Potash and Diphtheria.

HULLMAN *Jahrb. f. Kinderh.* [from *Deutsche Med. Wochen*, No. 46.]

The author has not lost his faith in this substance as a means of treatment in diphtheria, notwithstanding the fact that it may not have done well in others' hands when given in poisonous doses. He never uses a stronger than a four per cent solution, and never combines its internal use with its use as a gargle. He has never seen unfavorable kidney symptoms, in his practice, from its use, and combines with it plenty of nourishing food and good wine. During twenty years, he says, he has used it in thirty-five hundred and eleven cases, five hundred and seventy-one of which were cases of diphtheria. Only six of the latter were fatal, or about one per cent. In patients from one to two years of age, the doses never exceeded one gram each day; in patients from six to thirteen

years of age the dose varied from three to four grams daily, and in adults as much as eight grams daily were sometimes given. These quantities were often continued from six to eight days successively. In cases of diphtheria, in addition to the internal use of chlorate of potash, frequent garglings were prescribed of lime-water, soda solutions, or weak solutions of hypermanganate of potash, the results being quite satisfactory. The author believes that chlorate of potash is the best of all agencies which have been used for the treatment of diphtheria, especially when it is given in accordance with the directions of Mering, the chief of which is that it must not be given upon an empty stomach.—*Arch. Pediatrics.*

Tamponning the Larynx to Prevent Pneumonia as a Sequence of Diphtheria.

LANGENBUCH, of Berlin, according to Bouchut (*Paris Medical*), believes that pneumonia, which is so common in diphtheria, is always produced by the infection of the lungs through the secretions of the larynx and of the pharynx which pass into the trachea. To prevent this after tracheotomy, he places small pieces of sponge in an ethereal solution of iodoform and allows the ether to evaporate. These little pieces of sponge are fastened to a strong silk thread. After opening the trachea, he introduces one of some size into the cavity of the larynx with a pair of curved forceps, and fixes it there so solidly that it cannot descend further spontaneously. This done he inserts the tracheal canula, and either fastens the thread of the sponge to it or about the neck. The sponge can be allowed to remain in place as long as it is considered necessary without inconvenience.

Bouchut, in his comments, thinks it

would not be possible for these secretions to pass into the trachea without producing terrible attacks of suffocation. The pneumonia of croup may depend upon the action of cold air and of dust particles, which can be modified by the wearing of a muslin cravat about the neck, but this pneumonia results more especially from cardiac thromboses, which convey, by means of the pulmonary artery, microscopic granules of fibrine into the lungs, forming embolic pneumonia. It is then that we observe at first these nuclei of pulmonary apoplexy, sometimes greyish or softened in their centers, and following them, the areas of hepatization caused by a small infectious embolus.—*Medical Progress*.—*Med. Med. Journal*.

Corrosive Sublimate in the Treatment of Diphtheria.

In the *Therapeutic Gazette*, Dr. F. C. HERR publishes a communication strongly advocating the use of the corrosive chloride of mercury in the treatment of diphtheria. In an epidemic at Harrisburg it was administered to infants in doses of one-twelfth of a grain—every two hours for the first four doses, the interval then being increased to four hours—with excellent results. In one case two grains were given in the aggregate during the course of the treatment without bad effects. The original states that *ten* grains were given; but Dr. Herr informed us that this was a misprint, and that the amount given was that which we have just stated.—*Med. Times*.

The Poison of Diphtheria.

The Empress of Germany has awarded the prize for the best work on Diphtheria to Professor Otto Heubner, in Leipsic. He proves that in case of sup-

pressed circulation (by occlusion of the capillaries) in the submucosa, œdema, inflammation, and mortification with formation of false membranes, issues in the mucous membranes (Cohn's view); that the poison of diphtheria is still as unknown as that of morbilli, scarlatina, etc., and that that form of diphtheria heretofore artificially developed in animals *is by no means identical with that observed in human beings*; and that any substance causing the above-mentioned morbid condition (occlusion of vessels of supply) will give rise to artificial diphtheria. The proof is clear, and upsets all American discoveries of the micrococcus of diphtheria.—*Med. and Surgical Reporter*.

The Specific Treatment of Diphtheria and Croup.

Dr. GEORGE A. LINN, of Monongahela, Pa., read a paper maintaining that corrosive chloride of mercury was a specific in diphtheria, when given in large doses in the early stage of the disease. The mere giving of a remedy did not necessarily constitute its use as a specific. Minute doses of quinine, given two or three times a day, would not be a specific in malarial disease; so in treating diphtheria with bichloride of mercury, the dose, time of giving, and stage of the disease, were conditions necessary to success. It should be given in large doses, one twentieth to one twelfth of a grain to a child, two or three years of age, and one twelfth to one eighth of a grain to an adult every three hours. It was best given in solution. The apothecary should make a solution in alcohol and dispense from this. The best vehicle was the elixir of pepsin, or elixir of pepsin and bismuth, in teaspoonful doses. In mild cases, the remedy should be continued to the end of the third

day; in malignant cases, two or three days longer. If the treatment was begun in time, no tonic or sustaining measures were required. But, if the case was well advanced, brandy and iron should be added. If the membrane invaded the wind-pipe, causing croup, there was danger of suffocation from obstruction of the air-passage. This was due more to a spasmodic condition of the glottis than to the presence of membrane, and could be relieved by giving chloride of gold, which was a specific in simple croup. It acted like a charm, was tasteless, and caused no nausea. It should be given in solution in distilled water, the medicine being dropped into a glass and the use of a spoon avoided. The dose for a child two or three years old was from one fiftieth to one thirtieth of a grain every hour until relieved. In diphtheretic croup the bichloride of mercury was to be given in conjunction.—*N. Y. Med. Jour.*

Prescription for Diphtheria.

Mur. pilocarpin, gr. iss.; pepsin (Jensen's preferred), 3 ss; muriatic acid, gtt. x.; aquæ, ʒ viij. M. S. Teaspoonful every hour.

Gargle in Diphtheria.

R. Kali. chl., 3 ii.; glycerine; syr. simp., aa ʒ i. M. Et adde. Acid mur. dil. m., xl.; aq. q. s. ad., ʒ viij.

Chronic Rheumatism.

Dr. A. BARRY (*Medical World*): In chronic rheumatism, as in the acute variety, you may have sore joints and dropsical effusions. The chief difference is in the constitutional symptom of fever. You may have fever in this type, but not that high, inflammatory type that you have in the acute form. But

this, like the other, may affect any tissue, and this may be the cause of the inveterate backache and lumbago that is sometimes so prominent; the spinal membranes are affected. You may have the trouble in the stomach, with nausea; in muscles of the scalp, neck and face; the womb and ovaries are often affected. It causes dysmenorrhea and other troubles, and it often complicates other diseases in persons who have a rheumatic diathesis. If fever, use quinine; may give one dose of mercury, followed by bitart, potass, and sulphur. Keep open the outlets; do not neglect elimination. Every case should be treated on its own merits. Sometimes remedies act better when several of them are combined together in a formula. Use steam bath; place a hot brick in a tub and place patient, in a nude state, over this; cover him with a blanket, then pour water on the hot brick; do this once a day. Hot air medicated with iodine, is said to be good. If there is perspiration use alkalis. May use opium and chloral if there is much pain, but they blunt the sensibility of the kidneys. May give a dose of opium at night. Permanganate of potassium is used in this disease by some practitioners when other remedies fail. Sometimes it is necessary to blister, and it may be necessary to repeat two or three times before you get relief.

I give a few formulæ which in themselves will indicate in what kind of cases they should be used.

1. Tinct. phytolaccæ, tinct. guiac, equal parts. S. Give one-quarter to one teaspoonful, from three times a day to every four hours. It is said this will reduce the pulse down as low as you want it.

2. Fl. ext. podophyllin, 1 oz.; fl. ext. phytolaccæ, ½ oz.; iod potass, 1 dr; aqua

pura, 4 oz. ℥ S. Teaspoonful three times a day. Reduce the fluid extract of podophyllin if necessary.

3. Fl. ext. manaca, 2 dr.; simple elixir, 2 oz. ℥ S. Teaspoonful three or four times a day.

4. Tinct. cimicifuga, 1 oz.; tinct. phytolaccæ, 1 oz.; tinct. colchici, 1 oz. ℥ S. Take 20 to 50 drops three times a day.

5. Iod. potass., 4 dr.; fl. ext. aconite, 1 dr.; fl. ext. cimicifuga, 2 oz.; fl. ext. sarsaparilla, 2 oz.; vin. colch. sem, 1 oz.; syr. sarsaparilla comp., 4 oz. ℥ S. One to two teaspoonfuls every 4 to 6 hours.

6. Salicylic acid, 6 dr.; soda bicarb., 1½ oz.; aqua pura, 1 pint. ℥ S. Tablespoonful three times a day.

7. Salicylic acid, ½ oz.; tinct. colch. sem., ½ oz.; soda bicarb., 6 dr.; aqua, q. s. ad 4 oz. ℥ S. Teaspoonful 3 or 4 times a day.

8. Salicylic acid, ½ oz.; acet. potass., ½ oz.; Glycerine, 2 oz.; aqua pura, 2 oz. ℥ S. Take one or two teaspoonfuls in water every 4 to 8 hours.

9. Salicylate of soda, 30 parts; colchium seed, 20 parts; black cohosh, 60 parts; acetate of potash, 60 parts; oil of wintergreen, 1 part; simple syrup, 120 parts; water, to make 720 parts. ℥ S. Take a dessertspoonful three times a day.

10. Potass. bicarb., 1 oz.; soda bicarb., 2 oz. Mix and pulverize. S. Take a teaspoonful in cold water every 6 hours.

For Local Treatment.—1. Chloroform, 1 oz.; gum camphor, ¼ oz.; olive oil, 2 oz.; water of ammonia, 1 oz.; tinct. of opium, 1 oz. ℥ S. Shake, and use as a liniment.

2. Chloroform, 2 oz.; aqua ammon., 2 oz.; tinct camphor, 2 oz.; tinct. aconite rad. 2 oz.; alcohol, 2 oz.; spt. nit. ether, 6 oz. ℥ Said to be good for any kind of ache.

"Chelsea Pensioner."—Sulphur, 2 oz.; cream tarter, 1 oz.; powd. rhubarb., 2 dr.; gum guaiac, 1 dr.; clarified honey, 1 lb.; powd. nutmeg, 2 dr. ℥ S. Give a teaspoonful in honey, morning and night.

"Zollkoffer's Mixture."—Pulv. gum guaiac, 40 gr.; iod. potass., 40 gr.; tinct. colchi sem., 2 f. dr.; aqua cinnamon 2 oz.; simple syrup, q. s. ad. 4 oz. ℥ S. Take from 2 to 4 teaspoonfuls three times a day.

Acute Inflammatory Rheumatism.

The following formulæ are from *The Keystone Medical Journal*: R. Flu. ext, manaca, ʒj; salicylate of sodium, ʒij; tinct. digitalis, ʒj; aqua font., ʒijss. M. Sig. Teaspoonful in wine glass water every four hours. Also: R. Quinia sulph., grs. xxx; soda bicarb., ʒj; podophyllin, gr. j. Trit. and mix thoroughly and make twelve powders. Sig. One every four hours, alternated with above.

Liniment for Rheumatism.

The *Therap. Review* says: Methyl salicylate (oil of wintergreen) mixed with an equal quantity of olive oil or linimentum saponis, applied externally to effected parts in rheumatism, affords instant relief, and having a pleasant odor, is very agreeable.

Rheumatism.

R. Acid salicylic, grs. lxxx; potass. bicarb., ʒij; vini colchici, ʒijss; spirits ether nit., ʒij; aquæ ad, ʒij. M. Sig. ʒi every three or four hours.

Pathognomonic Signs of Disease.

Dr. E. G. JANEWAY, of New York, read a paper before the American Medical Association (*Louisville Med. News*),

on "the danger of relying too much upon so-called pathognomonic signs of disease."

It is often a very brilliant thing, he said, to make a snap diagnosis, but it is not safe to do so; for many so-called pathognomonic signs of special diseases are found, on closer inspection, not to be so in reality. For instance, optic neuritis, conjoined with headache, used to be considered as a pathognomonic sign of cerebral tumor. This is not so. We know that it only means that there is some increased pressure in the brain. You must also eliminate Bright's disease of the kidneys. Volitional tremor is thought by some to be very characteristic of multiple sclerosis, but a similar condition is observed in patients who are under the influence of metallic poisons, such as mercury, and also in those who have partaken freely of alcoholic stimulants. We often find considerable difficulty in cases of coma, in endeavoring to decide whether it is of hemorrhagic or uremic origin. The variations in the temperature of the body are here a valuable help in our investigation; but they are not sufficiently certain to found a positive conclusion upon. The existence of heart murmur, or the absence of it, does not positively settle the point as to whether there is an embolus in the brain or a hemorrhage; and albumen in the urine is often associated with these lesions. The author went on to consider cases—referring to heart and chest diseases. It is not wise to rely too much upon these signs, but to take the whole bearing of the case in making the diagnosis.

Dr. Frank Donaldson, of Baltimore, in opening the discussion, spoke of cardiac murmurs. He had known of cases in which the autopsy showed marked stenosis of the mitral orifice, which had presented no murmur during life.

Dr. Janeway said that in some cases of pneumonia of slight grade, bronchial breathing is not present, and he had seen people much misled by it. In regard to mitral stenosis he thought that it could sometimes be detected by a long first sound with a slightly blubbery character, even when there was no murmur.

Permanent Pills of Permanganate of Potassium.

According to a correspondent of the *Deutsche Medizinal-Zeitung*, a Russian pharmacist has hit upon an expedient for preventing the change which the permanganate is prone to undergo when made into pills. The formula is as follows: Vaseline, 2 parts; paraffin, white wax, each 1 part; white bole, 3 parts. The vaseline, the paraffin, and the wax are to be melted together, and when the mixture is cold the bole is to be added. The permanganate of potassium is to be reduced to a fine powder in another mortar, and then added to the mass. The pill machine used should be of horn or of wood.—*N. Y. Med. Journal.*

Mechanical Treatment of Hæmatemesis.

The difficulty of controlling hemorrhage from the stomach or œsophagus by any of the ordinary means led DR. SCHILLING to employ an apparatus by which direct compression might be made against the inner walls of the organ. It consists of a flexible stomach tube with a rubber bladder at one end and a stop-cock at the other. The bladder is introduced and very slowly and carefully inflated until it is made large enough to excite contractions in the stomach. In this way the hemorrhage is controlled. The air should be let out again very slowly, so that the clots may not be

loosened. If the bladder has been oiled previous to its introduction, the danger of adhesion to it of the coagula will be lessened. If this procedure fail to arrest the hemorrhage, we may then conclude that its source is in the œsophagus (usually it is at the lower portion of the tube), and recourse must then be had to the œsophageal tampon. The author relates one case of repeatedly recurring hæmatemesis, which was permanently arrested by the use of this bladder for twelve minutes. The inflation should be moderate, as the object is to excite contraction of the gastric walls and not to distend the organ.—*Centralblatt für Chirurgie.—Med. Rec.*

Formula for Hæmorrhoids.

DR. B. LEE, of Philadelphia, recommends the following: \mathcal{R} . Pulv. rhei., $\bar{\text{z}}$ iv. ; pulv. aloes, $\bar{\text{z}}$ iii. ; pulv. myrrhæ, $\bar{\text{z}}$ ii. ; sapon hispan, $\bar{\text{z}}$ ii. ; ol. cajeput, $\bar{\text{z}}$ i. The powders are to be rubbed up together, the soap worked in, and then the oil. The well-mixed mass should be used as fresh as possible, and should be kept in air-tight bottles. Three grains of the mass make an effective pill, which is not irritating, and may be used a long while without diminishing the susceptibility of the intestines, and often with positive benefit to the hæmorrhoidal affection.—*N. Y. Med. Record.*

Dr. Mittauer's Aperient Mixture (Alkaline Mixture of Aloes.)

\mathcal{R} . Aloes, $2\frac{1}{2}$ $\bar{\text{z}}$; bicarbonate of sodium, 6 $\bar{\text{z}}$; comp. spirit lavender, 2 $\bar{\text{z}}$; water, 4 pints. M. Macerate for two weeks and filter. Dose: 1 fl. dr. to 1 fl. oz. half an hour after meals for costiveness.—*American Druggist.*

DISEASES OF THE NERVOUS SYSTEM.

Sciatica Cured by Faradization—Three Sitzings.

Dr. H. B. FAY, of Washington, sends us the following translation: Dr. L. Duval writes to the *Abeille Medicale* of Paris, July 21, 1884, concerning his own case, as follows: On the 14th of June, at 8 o'clock, as I was about to go out to visit my patients, I was suddenly seized with a violent pain in the center of the calf of my right leg. This soon attacked the entire outward surface of the leg, becoming a dull, continuous pain, like that caused by a bruise. Upon the slightest movement it grew more intense, especially if I tried to rest the foot upon the ground. It compelled me to take to my bed and preserve the most absolute quiet. There was complete absence of fever. Towards evening the pain, which had not ceased for a single minute, moderated somewhat under the influence of terebinthine narcotics taken internally. I passed half of the night tolerably well, the other half in pain from two quite violent attacks. The next morning, with a sensation of numbness rather than of pain in the limb, I attempted to take some steps, but soon perceived that a new attack was forthcoming, if I did not again take to my bed. Then, with the prospect of being confined as on the previous evening, the idea recurred to me of having recourse to a remedy too much neglected in practice. I refer to faradization. At quarter of ten I took a sitting of some minutes. The result I can say was marvellous. At half-past ten I was able to get up and walk without the least trouble. On the 16th and 17th of the month, as a precautionary measure rather than from necessity, I took a sec-

ond and third sitting. To-day, June 25th, my cure is perfect.

This disease, which commonly does not last less than two weeks, has been literally *throttled* by the electric action, whose efficacy and rapidity is much preferable to that of the divers remedies employed externally and internally against this painful affection.

I publish this simple note in order to draw the attention of the profession to a therapeutic remedy which would be susceptible of rendering most valuable assistance, but is not sufficiently used in practice.

DIGESTIVE TRACT.

Ulceration of Bowels with Copious Hæmorrhage. Cured by Castor Oil.

HILDYARD ROGERS, M. R. C. S., in the *Br. Med. Jour.*, reports the following case: Miss G., aged 28, had been suffering since the beginning of March, 1883, from diarrhœa, accompanied by hæmorrhage. She was looking plump and well nourished, and had no pain. The tongue was clean, but red. Nothing abnormal could be made out on abdominal palpation. The heart and lungs were sound. There was no cough. The urine was normal. The rectum was slightly dilated. She had internal piles, which had bled occasionally, but not to any extent. She had always been regular and healthy. She had, since the beginning of March, been passing daily two or three loose motions, containing shreds of mucus and dark clots of blood. Temperature (morning) 101.3° Fahr.; pulse 120. Between March 22d and May 9th the diarrhœa steadily increased in severity, and the blood changed from dark clots to a bright arterial color. At the latter date the motions consisted apparently of little

else than blood and mucus, and the bowels were acting ten or twelve times in the twenty-four hours. There was at times troublesome vomiting and steady loss of flesh, but never during the course of the illness any pain other than that arising from bed-sores and from the patient's general weakness. The most careful examination, as well as the character of the motions, showed that the blood did not come from the internal piles, or from the lower part of the bowel.

The patient was seen in consultation by three or four physicians, all of whom concurred in the diagnosis. Opium, belladonna, bismuth, cerium, logwood, nitrate of silver, etc., were found utterly useless. Suppositories and injections of various kinds were tried without avail. By May 9th she was reduced to a very emaciated condition, and was too weak to turn in bed. Her condition appeared almost hopeless. At the suggestion of Dr. Gibson of Newcastle, drachm doses of castor-oil each day were tried. Within twenty-four hours after taking the first dose, she passed a feculent motion. The castor-oil was repeated eight times up to May 20th, and after this only occasionally. The temperature fell in forty-eight hours from 103° F. to 99° F., and never rose again above 100° F. The diarrhœa rapidly abated, the stools becoming feculent and healthy. No blood was passed after May 18th. The patient rapidly regained flesh and strength and finally recovered.—*Med. Med. Jour.*

Injections of Ergotin into the Spleen.

Professor FENOGLIO ("Spallanzani;" "*Centralblatt f. d. ges. Therapie*") has recently made use of injections of Bonjean's ergotin into the substance of the spleen in a case of swelling of the

organ which had proved rebellious to other treatment. The injections were repeated on different days, with anti-septic precautions, using five centigrammes dissolved in a cubic centimetre of hot water. A decided diminution in the bulk of the organ is said to have been the result.

Tropical Diarrhœa.

Sir JOSEPH FAYRER (*British Medical Journal*) says that diarrhœa is a symptom of disease rather than a disease itself, and may depend on a variety of causes.

1. On efforts to rid the intestine of peccant matters, poisons, acrid secretions, food, drink, entozoa.

2. On disease of the liver or spleen, derangement of their functions, portal congestion, or on lesions or disturbances of the mucous lining and follicles of the intestines.

3. On efforts at elimination of morbid matter in the blood, as in septicemia, renal disease, gout, fever, etc.

4. On re-absorption into the blood of excretions and secretions, the suppression of natural discharges.

5. On malarial and climatic influences, miasmata of various kinds, especially of putrescent organic matters, intemperance, foul air and gasses, sudden alternations of heat and cold, moist and dry air.

6. On mental emotions, such as fear, anticipation, anxiety.

7. As the result of degeneration and atrophy of the tissues, of the bowel in particular.

8. As a consequence of starvation or of malarial cachexia when it is wasting and chronic in its character. A severe form of diarrhœa also, with dangerous and severe symptoms, is described as caused by bacteria (mycosis intesti-

nals) by von Recklinhausen and others the disease and the consequent diarrhœa being caused by a form of anthrax or malignant pustule in the intestines.

Having regard to these causes, a certain classification of the disease which answers well enough for practical purposes may be stated in the following terms:

Feculent diarrhœa, the result of the presence of certain irritating matters in the *primæ viæ*, removed with removal of the cause.

Catarrhal or congestive or inflammatory diarrhœa, due to continuance of irritation, or catarrhal conditions thereby induced, or to constitutional causes.

Diarrhœa from checked action of the skin, or from miasmata, when the mucous surface, villi, and follicles of the intestine may be implicated.

There may be inflammation or even ulceration, and serous, mucous, or fibrinous and flaky discharges, mixed with fecal matter, accompanied by pain, griping, and even blood; indeed, it is apt to pass into dysentery, perhaps is dysentery from the commencement. And though these cases are generally amenable to early treatment, they may pass into a chronic stage, and so closely resemble, if they be not identical with dysentery, that they may be called either dysentery or diarrhœa.

Then there is the billious diarrhœa, the autumnal or summer diarrhœa, the so-called sporadic cholera, which sets in with great violence, and may so exhaust the patient by the loss of serum which accompanies or follows the expulsion of the ingesta, and billious and other secretions, that symptoms of collapse and other conditions peculiar to true cholera, such as cramp, suppression of urine, great thirst, may occur. It may happen in this country, and often

causes great debility. The conditions are indeed very like, if not identical with, those of true cholera, the appearance of which is frequently heralded by cases of this kind, and often a source of anxiety in India, when such an attack of diarrhœa makes its appearance, lest it should pass into the true cholera.

Haypily. it is often readily controlled; but those who have been in cholera camps and regions, and have had to deal with outbreaks of cholera, know the vital importance of checking looseness at the outset, feeling well assured that by so doing they may in many cases prevent the sufferer from passing into the dangerous condition that is foreshadowed by the diarrhœa.

Doubtless, astringent and sedative remedies are sometimes given when a dose of castor oil or Gregory's powder would have been more to the purpose, but that is an error easily rectified; whereas the passing of diarrhœa into cholera is a very serious matter, and may prove fatal.

Lastly, there is the chronic form of diarrhœa depending on visceral changes due to constitutional causes and defective nutrition.

For Indigestion.

R̄. Tinct. hydrastis, ʒ ij.; tinct. nux vom., ʒ ij.; glycerine and whisky, ad. ʒ iv. M. Sig. Teaspoonful one hour before meals, and take same quantity of the following just after each meal: R̄. Sacch. pepsin, ʒ iv.; acid. mur., ʒ ij.; glycerine, ʒ ij.; water, ad. ʒ iv.—*Med. World*.

The Use of Large Doses of Epecacuanha in Simple and Sloughing Dysentery.

Some years back, in my capacity as Government Medical Officer to the Immigration Department, Natal, with a

daily average of, say, over twenty patients suffering from dysentery alone, I had every opportunity of testing the efficacy of its treatment by the above-mentioned drug; and I have no hesitation in fully endorsing Dr. Ewart's advocacy of full doses—say from forty to sixty grains of powdered ipecacuanha; but I would call attention to one most important precaution of which I see no mention in Dr. Ewart's interesting paper, that is, the denial of all fluids for two or three hours previous and subsequent to the exhibition of the drug, which in almost all cases totally counteracts any tendency to emesis or even nausea, but is a complete bar to (as far as my experience goes) the comparatively abortive treatment of repeated small doses. Briefly, my rule of treatment was: Denial of all fluids for, say, two hours; then insert an opium suppository; twenty minutes afterward apply a large linseed poultice, sprinkled with mustard, to the epigastric region, followed in ten minutes by forty grains or upward of powdered ipecacuanha, inclosed in wafer paper (failing wafer paper, cigarette paper suffices) with not more than a dessert spoonful of milk or thick rice water to assist deglutition; the recumbent position, quietude, and denial of all fluids for at least two hours subsequently to be strictly enforced. Used in this manner, I can safely assert that ipecacuanha proved in hundreds of cases no less a specific in dysentery than quinine in the equally prevalent disease of malarial fever; but I may add *apropos* of the latter drug that I found the *coup-sur-coup* treatment—say one to three grains every three hours—gives far better results than the heroic doses of from twenty to thirty grains in vogue in the island of Mauritius.—*Lancet*.

DISEASES OF RESPIRATORY ORGANS.**Antiseptic Inhalations in Phthisis:**

Dr. C. NELSON GWYNNE publishes a paper on this subject in the *Medical Press*, in which he says that while he believes that the bacilli are reasonably secure from the action of antiseptics, yet as a valuable adjunct to the general treatment he is convinced of their very great importance. The almost unanimous opinion regarding their value by the patients themselves confirms him in his opinion. That they "ease the breathing," "assist up the phlegm," "lessen the phlegm," are the expressions he daily hears regarding them; and the benefit derived is so great that many of his patients make use of the respirator-inhalers much more frequently than he had recommended, and after many months of experience still are as firmly convinced as ever of the benefit they receive from their use. The principal ingredients he has used are carbolic acid, creosote, thymol, iodine, and turpentine; and all these his patients have had no difficulty in using, nor had any dislike to, with the exception of the iodine. The etherialized tincture is, he finds, well recommended; but he could never induce his patients to make use of it for any length of time, nor did they speak favorably of the benefit derived from it.

There are a great number of antiseptic respirators in use, but the one he generally adopts is Dr. Wm. Roberts'. It is of blackened metal, perforated with large holes at the front, shaped to the lips, and half or three-quarters of an inch in depth, with a hinged lid which opens outwards, and allows the introduction of some cotton wool saturated with the material intended to be inhaled. There can be little doubt that impregnating the air of the room with

antiseptics will finally take the place of respirator-inhalers, and already many plans have been devised for doing this. If towels saturated in carbolic acid are hung in a room, it has been found that after a few hours nearly all the carbolic acid will have disappeared from the towels, and will have been taken up by the air of the chamber. Of all the antiseptics, creosote perhaps holds the highest place for this purpose. There are well authenticated cases recorded of phthisical cases having quite recovered by engaging in the manufacture of this article.—*Med. & Surg. Reporter*.

Aluminium Treatment of Phthisis.

The *Lancet* quotes from an article in the *Pharmaceutical Journal*, in which Dr. PICK affirms that aluminium and its compounds constitute most effective remedies against pulmonary tuberculosis, as shown by experiments on rabbits and by clinical observations. In one case, where infiltration of the apices of the lungs had occurred, removal of the lesion and a disappearance of all the symptoms are said to have followed the administration of the metal in the following form: Metallic aluminium, 8.0 grammes; hydrate of aluminium, 5.0 grammes; carbonate of calcium, 5.0 grammes; gum tragacanth, q. s. Divide into sixty pills. One to be taken three times a day.

Hodgkin's Disease.

Prof. DA COSTA has under his care a patient who has had Hodgkin's disease for fifteen years. The disease has been kept in check by living in a yacht, supplementary to treatment. He strongly urges arsenic, increased in dose until constitutional symptoms are manifested, and kept there, as the best medicinal treatment.

CONSTITUTIONAL DISEASES.

Antipyrin.

The reports concerning the antipyretic effect of antipyrin accumulate, and prove that the remedy does not only cause a decided and prompt reduction of temperature, but also has the great advantage of not being accompanied or followed by any of the disagreeable effects of quinine.

Antipyrin is best administered in hourly doses of $32+32+16$ grains, so that within two hours the whole dose of 80 grains is taken. The reduction of temperature varies from 2 to 6 degrees, and sets in gradually. As soon as the effect of antipyrin has ceased, which usually happens within five hours after the last of the three doses mentioned, the temperature continues stationary for an hour or two, and then slowly ascends to its former height, if meanwhile no more doses of antipyrin are administered. In a case of tubercular phthisis, with hectic fever, where the temperature rose every afternoon at three o'clock to $104\frac{1}{2}^{\circ}$, the first dose of 32 grains of antipyrin was given at 12 M., the second of the same quantity at 1 P. M., and the last of 16 grains one hour later. The temperature at 3 P. M. rose to but $99\frac{1}{2}^{\circ}$, and continued at that height till 8 P. M., when it again ascended to $100\frac{1}{2}^{\circ}$. If a fourth dose of 32 grains was administered at 6 P. M., the temperature declined still more, until it reached at 8 P. M. 98° , when it again gradually crept up to $99\frac{1}{2}^{\circ}$. No nausea and no tinnitus aurium were observed.

Recently Dr. C. RANK reports, that the drug occasionally causes nausea and vomiting, if administered internally (*Allg. Med. Centr. Zeit.*, 52, 1884). He therefore made use of it by the hypodermic method, and found it, in a series

of fifty cases, not only to answer admirably well, but to have a still prompter and more decided effect than if given internally, but also never to produce any disagreeable symptoms. As antipyrin dissolves in cold water but sparingly (1 : 3), and as 32 to 64 grains must be injected under the skin to obtain the full antipyretic effect of the drug, Dr. R. made a trial with hot water, and discovered that 16 grains of antipyrin dissolves in 8 minims of hot water, and that the remedy does not precipitate when the solution has cooled down. After having been kept in a room for a period of eight days, this solution was still clear. One or one and a half syringefuls of it suffices to produce the antipyretic effect of antipyrin.

The injections were usually made in the region of the glutæus muscles, and with the exception of a very slight and transient pain, no local symptoms showed themselves at the place of injection, no inflammation, hardening or formation of pus. Where internally, eighty grains are necessary ($32+32+16$ grains administered hourly), R. succeeded with one hypodermic dose of one, or at most one and a half syringefuls of his solution. According to his experience, the maximum of decline of temperature happens about three hours after the injection, and continues from six to eight hours.

It is well known that with one or two doses of sulphate or muriate of quinine, of thirty grains of each, we may obtain a similar antipyretic effect; but quinine has the drawback in such doses generally of inducing vomiting, and often tinnitus aurium, besides producing not seldom other more dangerous symptoms due to congestion of the brain. That antipyrin, while possessing, if possible, a still prompter antipyretic effect—more decided and more lasting—has

none of these disagreeable symptoms, makes this drug so valuable. To these facts may be added, as of not less importance, the facility with which antipyrin can be subcutaneously employed. Lastly, it is but half as dear as quinine. —*Med. & Surg. Reporter.*

The Treatment of Pernicious Intermittent Fever.

DR. W. H. REED reports an interesting case, which yielded to treatment, in the *College and Clinical Record*.

His treatment was as follows: Immediately a hypodermic injection of one-sixth grain of morphinæ sulph.; hot sand-bag to lumbar region; one pil. podophyllin comp., and two grains of of quinæ sulph., in pills, every two hours, until twenty grains were taken. He was sent for hurriedly, with the statement that his patient was dying. On his arrival by her bedside, he found her in a sinking condition; in the meantime she had had several convulsions; was now at times in a low delirium, muttering inaudible and unconnected sentences, and picking at the bed-clothes. Her countenance was relaxed, tired, worn, and haggard; skin somewhat cooler, and pulse almost imperceptible; heart sounds feeble; respiration slow and gasping. The pain had left the back, from the application of the sand-bag. He immediately stimulated her freely with whiskey, which at first produced retching, but not vomiting; then he was informed that on two occasions previously she had vomited blood. He ordered dry heat over her stomach, which successfully allayed further vomiting and retching, thereby enabling her to retain all medicine administered. A strong milk punch was given at intervals during the night, and the quinine pills continued as before ordered. Next day he found his pa-

tient much improved; she was lying quietly in bed, her mind clear and buoyant, but she was much exhausted and debilitated. The delirium passed off about midnight, and her bowels moved freely toward morning. Her skin was almost normal in temperature, and but slightly jaundiced; heart sounds regular, but slightly feeble; respiration normal; no thirst; tongue coated with a rather heavy fur; she ate some prepared gluten and milk for breakfast. He prescribed—*R.* Hydrargyri chloridi mitis, gr. ij.; Pulv. ipecac., gr. ij.; Pulv. ingluvin, \mathfrak{D} j. M. Fiant chartæ viij. Sig. —One to be taken every two hours. He also gave her ten-drop doses of Fowler's solution three times a day. When he saw her again two days later, his patient was out of bed, with skin comparatively clear; appetite returned, and she was commencing to feel strong again. At the septenary periods he prescribed twenty-four grains of cinchoninæ sulphas. One week later he diminished the Fowler's solution to five drops three times a day. Two weeks later he saw his patient; she was feeling exceedingly well, with no symptoms of a recurrence of the chill.—*Ibid.*

The Treatment of Diphtheria by Papayotin.

During the last few years Dr. SCHÖFFER has tried most of the remedies recommended to be used in cases of diphtheria, and obtained the best results from papayotin; last summer he treated 47 cases with a five per cent. solution (of papayotin). He begins the treatment as soon as possible, and orders the patches to be painted every five or ten minutes with this solution; in a few hours the membranes are said to be removed, and at the same time the fever disappears. Ewald suggests that an active pancreatic extract should be used instead of papayotin.—*Med. Times & Gaz.*

Germ Origin of Disease as Seen by a Naturalist.

Dr. W. S. NEWTON (*Peoria Med. Monthly*): There are other ways to determine the germ origin of disease besides the use of the microscope. If confined to this instrument, there are many scientists and physicians on account of defective sight and other causes that would never be able to make investigations in this interesting field, or draw any correct inferences relating to it. Recently, by the aid of the glass, however, rich discoveries have been made in microscopic germs causing disease, and we are to expect in the near future these discoveries will be enlarged and crystalized into usefulness, and others, grand and noble, will be added to them. We are in danger at the same time of making this a rage and a pet, of imputing too many of our maladies to these mysterious agents. We should, when possible, wait for positive facts in all mysterious matters of science before forming an opinion. But we cannot depend on the microscope in all diseases for facts.

Some germs causing disease are so small that nothing but the Divine Mind that formed them can see and estimate them.

The power of the microscope in the near future may be so increased that we can look deeper and further into the microscopic world. Beyond its vision, however, there will be noxious germs, no doubt, living, moving and having life, no glass ever invented by humanity will reveal to us. How are we to suspect that such creatures, zoological and floral, do exist? Can we not say to almost a certainty that they do exist in some cases by reasoning? If so, how?

When a disease has a germ origin, it presents to us in its course some of the

traits or phenomena of organic life, animal or floral.

Let us name a few of those phenomena, and then apply them to our common diseases.

1st. Animals and plants are so nearly similar that what fact will apply to one applies to the other also. An egg of an animal and a seed of a plant are similar structures, and the beginning of all organic life. After life is [originated, in many cases it may be propagated by buds. To start life from seeds and eggs, they must be submitted to either germination or incubation and consequent fermentation.

2nd. Germination or incubation puts in motion a force called fermentation or zymosis. No organic body can decay and rot without fermentation. Flesh, fruit and all organic bodies would never decay if millions of germs did not incubate in every fibre and atom and set up fermentation and consequently decay.

The tooth of oxygen may eat iron and nearly all metals without germ life, but when organic bodies decay incubation or germination starts the process. In some countries meat is elevated in the air above germ life and this saves it from putrefaction even when the days are hot. Fruit is sealed in cans not to keep out air but germ life. In any disease then where there is putrefaction and fermentation or zymosis there is abundant germ life for a cause.

3d. There are floral and zoological zones around the earth running with the equator or parallels, and each zone has its peculiar flora and fauna. If the elephant and other phenomenal animals and plants live in such zones, microscopic animals and plants causing disease will also.

4th. Some plants and animals flourish in certain regions—in swamps, in valleys dark and cold—and some are marine or

aquatic and some inhabit sandy plains. When germs of this kind cause disease we call the malady endemic.

5th. Animals can travel with the wind and against it. Plants are carried by streams and the wind and by animals, and never against the wind.

6th. Plants grow in the warm days of summer, rest in winter and with the spring revive again. Insects also live in the summer.

7th. Animals may be entozoal and live in the dark, true parasites, but plants cannot flourish in the dark. Wood and Gray both say plants must have light for healthy growth. When plants cause disease we must suppose they grow on the surface of the body in the light. Animal germs may live anywhere in the body in the dark and in the light.

8th. Animals and plants are not attacked by parasites when in perfect health like when they are sickly and weak.

9th. Certain agents destroy organic life when applied to it. We call these agents antiseptics.

Let us now try some of our common diseases by these traits or forms of organic life and see whether we can find any similarity.

Typhus and typhoid fevers have plantings and growings. Zymotic, zoological zone for former. Antiseptics influence them.

Small-pox, scarlatina, measles and other eruptions—planting and hatching, travel against the wind, zymotic zones for some of them. Antiseptics influence.

Whooping cough and mumps—planted and incubation, travel against the wind. Spread by germs.

Ague and intermittent fever—planted and germinate. Travel from swamps with wind, flourish in the summer, rest

in the winter, start up to life in the spring. Antiseptics influence.

Goitre—endemic to mountain valleys; affect the weak; is influenced by antiseptics.

Consumption and scrofula—Seem to grow after planting; afflict the weak; have a zone; affected by antiseptics; grow in the dark; seem to be animal germs causing them.

Cancer and lupus—incubated and grow to maturity; may be planted; seems to spread by pudding like protozans.

Gonorrhœa and syphilis—planted seem to incubate and at maturity bear seeds or eggs; affected by antiseptics.

Leprosy and skin diseases—grow in the light; afflict the weak; spread to planting.

Hydrophobia, snake bite and skunk bite—grow by planting; seem to be affected by antiseptics; zymotic.

Rheumatism—flourishes in damp weather; influenced by antiseptics. Said to be zymotic.

Yellow fever—has a zone; flourishes in warm weather like the plants and hexapods.

Erysipelas, influenza, puerperal fever, typhoid pneumonia and putrid sore throat—spread by planting; affected by antiseptics; zymotic.

The above observations were made in a great hurry in a busy life and are not claimed to be perfect by any means, but they open a new field for thought and study so far as I know. This is my apology.—*Peoria Med. Monthly*.

Rheumatism.

R. Ol. sassafras, $\frac{3}{4}$ ss.; ol. turpentine, $\frac{3}{4}$ ss.; ol. capsici et ol. lobelia, aa $\frac{3}{4}$ ij.; ol. wintergreen, gtt. xx; alcohol, $\frac{3}{4}$ iij. M. Sig.—Liniment. Apply twice daily with brisk friction.—*Ibid*.

The Treatment of Diphtheria.

Dr. J. W. MOORE says that in his hands the following line of treatment, which he publishes in the *Med. Annals*, has been almost uniformly successful in the cases that he has treated during the past six months, the rate of mortality being two to thirty, these two dying from fibrinous tracheo-bronchitis. After attending to the hygienic necessities as far as possible, such as putting the patient in a well-ventilated room, the air of which is both warm and moist, with the temperature between 60° and 65° (assuming that we are able to put our patient in a comfortable room, as often we have to treat them as we find them), and thin patches of false membrane presenting themselves, with other concomitant symptoms, he gently sprays the throat with a weak solution of chlorine gas, made by the action of tr. chlor. iron on potassium chlorate, slowly adding water as the chlorine is given off. He then gives, according to age, from ten to fifteen drops of the tr. of iron every three hours in a little glycerine and water; good nourishing diet, such as milk, eggs, etc. On the second day, if the disease is not checked, he gives one drop of Lugol's solution of iodine, and a half drop of carbolic acid, in a little water and glycerine, every two hours, and increases the intervals of the iron to four or five hours. He also uses a direct application, discarding the spray, of a mixture of iodine, glycerine, and carbolic acid.—*Med. Surg. Reporter*.

Treatment of Diphtheria.

Prof. DA COSTA says that bichloride of mercury, gr. $\frac{1}{20}$ — $\frac{1}{8}$, every two or three hours, has given him most success in its treatment, though he recommends a saturated solution of chlorate of potassium combined with tonic doses of

iron and quinine, where the membrane is not spreading. The best gargle is a solution of thymol, gr. xx to the ounce of water, with a little glycerine added; this may require weakening. Boracic acid in solution is the next best gargle. But one case of tracheotomy, in his experience, performed for laryngeal diphtheria, survived (a boy, aged eleven), and he has almost ceased urging it on parents, except in older children. Prof. Da Costa heard Trousseau say, "Fifty cases of nasal diphtheria mean fifty cases of death," but has had cures enough to make him approach a case with more hope and determined to continually inject the posterior nares with the following :

R. Sodii sulphit, 3 iij; glycerine, 3 ij; aqua, q. s., 3 iv. M.—*Col. and Clin. Record*.

A New Remedy for Diphtheria.

The Medical Society of Hospitals in Paris in its meeting of May 9, this year, debated the treatment of diphtheria. Nothing new was brought up save a peculiar method employed in Delthil's clinic. D. burns in the sick room an equal mixture of coal-tar and ol. terebinthinæ, causing the formation of thick, black vapor. The air of the room becomes impregnated with carbon in various combinations, and the latter are said to dissolve the fatty substances which unite the constituent parts of the diphtheritic membranes. In consequence of this chemical action it is believed the membranes lose their tenacity and their adherence to the tissues, and their expectoration is easier.

D. tried this method on four children, on whom on account of laryngeal diphtheria tracheotomy had been performed. Three of the patients died. But remembering the fatality usually

attending cases of this kind, the result is, if anything, favorable. Dr. Féréol employed the same treatment on an adult, suffering from a mild type of the same disease. After each fumigation, which was very well borne by the patient, free expectoration ensued, and on the second day the membranes had become soft and were much less adherent.—*Deutsch Med. Z.—Med. and Surg. Reporter.*

Iodide of Arsenic in Diphtheria.

Dr. J. E. MARSK (*Eclectic Medical Journal*) says he has treated one hundred cases of diphtheria with a triturate of iodide of arsenic—one part of the iodide of arsenic to twenty of sugar of milk—without a death, and in every case the whole treatment has been: \mathcal{R} . Tinct. of Acon. (root or leaf?) gtt. 5 to 10; triturate of iodide of arsenic, grs. 3 to 10; water, \mathfrak{z} 4. M. S. Teaspoonful every hour. Arsenic poisoning is seldom seen; when it does appear, stop the remedy or reduce the dose. Gargle the throat with a solution of common salt in water frequently.

Cyanide of Mercury in Diphtheria.

Cyanide of mercury in diphtheria is again in use—1-60 to 1-80 gr. hourly, or oftener, day and night, preferably in solution; to young children, smaller doses.—*St. L. Cour. of Medicine.*

The Hygienic Action of Naphthaline and Bromide of Zinc

Has been examined by TESTA and reported in the *Gaz. degli Ospitali*. The experiments made by the author have enabled him to see that naphthaline has a general and local action that are about inoffensive. This substance, injected hypodermically in doses of one gramme,

produced in guinea pigs but a light and transitory trembling. The normal temperature is not sensibly lowered under its influence, but the thermic elevation of fever falls very rapidly one-half or even one degree. In the same manner, bromide of zinc especially studied by Dr. Testa, has been shown to have an action identical with that of bromide of potassium, with this difference that it is depressing and that its influence is much more feeble.—*Weekly Med. Review.*

Diagnosis of Pleuritic Exudations by the Tuning-fork.

The following are Dr. FEDERICO's conclusions relative to the utility of the tuning-fork in the diagnosis of pleuritic effusions and exudations (*Gazzetta Medica di Roma, Med. Record*): 1. If the vibrating tuning-fork be applied to any part of a normal thorax, a full, distinct and augmented sound results. 2. When made to vibrate while in contact with thoracic parietes within which there exists an effusion, and particularly if placed over that portion of the chest where the dullness on percussion is most marked, the tuning-fork emits a short, obscure and muffled tone. 3. The sound is shorter and more muffled in proportion as the fluid is more abundant. 4. Although the author has, thus far, only experimented with serous effusions, he inclines to the belief that the sonorous vibration of the instrument would be still more weakened and obscured if the effusion were rich in corpuscular elements. This theory derives support from the fact, experimentally demonstrated by the author, that the vibrations of a tuning-fork immersed in a watery fluid contained in a thin vessel are communicated to the receptacle, while the vibrations cease to be perceptible when the serous fluid is replaced

by a purulent one. The author recommends the adoption of the following precautions in the application of the tuning-fork to its proposed diagnostic use: 1. The instrument should be placed in contact with corresponding parts of both the normal and disease half of the thorax, for purposes of comparison. 2. An instrument with long branches facilitates the perception of slight variations in pitch and quality. 3. The vibrations imparted to the tuning-fork should be of moderate intensity, lest they be transmitted to the stomach and colon and be thereby unduly augmented. 4. A certain amount of force should be employed in holding the instrument in contact with the chest-wall, as the vibrations are not well transmitted if this precaution be omitted.—*Weekly Med. Review*.

Artificial Food for Children.

There has been great discussion as to the qualifications of condensed milk as a substitute for the human article. Some men strongly advocate its use, while others bitterly condemn it. After reporting a case of infantile scurvy, in a foreign exchange, Dr. EDMOND OWEN says:

"The opinion which I have been compelled to form in my work in the out-patient rooms of the Children's Hospital, is that the worst nourished of the hand-fed infants are those that have been reared on condensed milk and the various patent food stuffs; and that whenever an infant cannot have human breast-milk, the best substitute will be found in fresh cow's milk prepared and administered *secundum artem*.—*Med. and Surg. Rep.*

[The above must be taken with some degree of allowance. We have in a number of instances seen good results follow

the use of condensed milk in cases where the cow's milk was not tolerated.—ED. REC.]

Convallaria Majalis.

Convallaria majalis is not as perfectly safe as some have believed. Dr. GEORGE HERSHELL relates in the *Lancet* the case of a man, apparently healthy, who had an irregular pulse following worry and overwork two years ago. The patient had been taking digitalis, but this was discontinued, and, after an interval of a month or two, tincture of convallaria was ordered in five minim doses three times a day. After a few doses he was obliged to stop its use on account of its remarkable effects. Almost immediately after taking a dose the pulse became nearly imperceptible at the wrist, and there was a sense of oppression over the sternum, nausea, cold feet, vertigo, flatulence, and a feeling of utter prostration. These symptoms lasted two hours, but came on again at each repetition of the dose.—*Weekly Medical Review*.

Enlarged Spleen.

R. Tr. polymnia uvedalia, $\bar{\text{ss}}$ ij.; tr. nux vomica, gtt. xx; aqua dest., $\bar{\text{ss}}$ iv. M. Dose—Teaspoonful thrice daily.—*Med. Summary*.

Chronic Intermittent.

R. Ext. eucalyptus glob. fluid, $\bar{\text{ss}}$ ss.; tr. quassia, $\bar{\text{ss}}$ ss.; aqua pura, $\bar{\text{ss}}$ ij. M. Dose—Teaspoonful four times daily.—*Ibid.*

Intermittent Fever.

R. Quin. sulph., $\bar{\text{ss}}$ ss.; acid hydrobrom., $\bar{\text{ss}}$ i.; syr. rolat., $\bar{\text{ss}}$ ss.; aq. ad., $\bar{\text{ss}}$ ij. M. S.: $\bar{\text{ss}}$ i. as dose.

DISEASES OF THE NERVOUS SYSTEM.

Practical Hints Regarding the Methods of Examination Employed as Aids in the Diagnosis of Nervous Diseases.

Dr. A. L. RANNEY, *Med. Record* :

The Condition of the Sensory Nerves.—

Before completing a diagnosis of some forms of nervous disease, it is necessary to investigate the following functions: 1, the condition of the sensory nerves of the skin in respect to the sense of touch; 2, the appreciation by these nerves of varying degrees of temperature; 3, the appreciation by the patient of painful impressions transmitted to the brain by the nerves; and 4, the condition of the special senses of sight, smell, hearing and taste.

Tests for Tactile Sensibility.—In this series of tests, as also in those employed to detect abnormalities of appreciation of different degrees of temperature, the following precautions must be taken against error in the results obtained:

1. The *nature of the tests* to be employed must be clearly explained to the patient, as well as the importance of accuracy in his decision respecting the sensations perceived. This insures his intelligent co-operation, and makes the patient more earnest in his endeavors to answer correctly.

2. The *patient must be blindfolded*, in order to avoid any information respecting the tests used reaching him by sight.

3. In order to make the patient keenly alert to avoid errors of statement, it is well to employ *blank experiments* from time to time. Thus, when the skin has not been touched with any instrument or foreign substance, it is well to ask "where the object is now felt," "how many points are now in contact with the skin," etc.

Having explained the objects of the

tests about to be employed and then blindfolded the patient, the tactile sensibility of the skin should be first determined by the following methods:

(1) *Consciousness of simple contact impressions.* When the skin is brushed by a hair or a fine feather, notice, first, if the patient perceives the contact immediately, and secondly, if he can describe the sensation correctly.

(2) *The ability to locate contact-impressions.* With tests of decreasing delicacy (the touch of a hair being the most delicate, and painful impressions the least so), notice to what extent the patient is able to correctly designate the point of contact of the body employed with the skin of different localities.

(3) *The degree of sensibility of different regions.* This has to be investigated with great care in some cases. Several methods are employed to determine it with accuracy. These are as follows:

(a) *Objects of different shapes* may be laid upon the skin and the patient requested to describe their form and character. Coins, keys, and weights may be employed for this purpose, as they are always to be had. This test should be used over many parts of the body and the results obtained compared with those of similar experiments made by the physician upon himself or some healthy person.

(b) *The appreciation of pressure*, as suggested by Weber, may be tested by placing weights of varying sizes upon the skin of some part, that has previously been supported in order to avoid the so-called "muscular sense" being a factor in the patient's decision. Dr. Beard has devised an instrument for this test that answers all purposes very well.

(c) Again, the various forms of *æsthesiometers* are used to detect the minimum distance which can exist between

two points of simple contact with the skin without destroying the distinct perception of both points by the patient. This distance varies in health between

been devised, but a simple pair of compasses, such as are used by artists, will answer all purposes. The distance between the points can be ascertained by



FIG. 1.—Beard's Piesmeter. This instrument consists of a spring in a tube that resists pressure made upon the piston. A scale indicates the amount of pressure upon the springs. It is employed to determine the degree of sensitiveness to pressure in different parts of the body. The forehead, tongue and cheek are the most sensitive to pressure; the least so are the backs of the thighs and legs.

a rule graded in inches, lines, or millimetres. The points should not be sharp, as they will cause pain if so,

extremely wide limits, because some regions are abundantly supplied with sensory nerves and tactile corpuscles while others are not. For this reason, the following measures can be used as the healthy standard for comparison in any given case. They are given in inches, lines, and millimeters so as to meet the requirements of any scale:

1. Point of tongue.....	1-24 in.	= ½ line	= 1.1 mm
2. Palmar surface finger tips 1-12 "	"	= 1 "	= 2.2 "
3. Mucous surface of lips. . 1-6 "	"	= 2 lines	= 4.2 "
4. Palm of hand & tip of nose ¼ "	"	= 3 "	= 6.3 "
5. White part of lips.....	1-3 "	= 4 "	= 8.4 "
6. Lower part of forehead. 5-6 "	"	= 10 "	= 21.1 "
7. Back of hand	1 1-6 "	= 14 "	= 29.2 "
8. Dorsum of foot.....	1 ½ "	= 18 "	= 37.5 "
9. Forearm.....	1 3-5 "	= 19 "	= 39.6 "
10. Sternum.....	1 4-5 "	= 21 "	= 44.1 "
11. Middle of thigh.	2 ½ "	= 30 "	= 62.5 "
12. Back.....	2-35 "	= 31 "	= 66.0 "

Various forms of æsthesiometers have

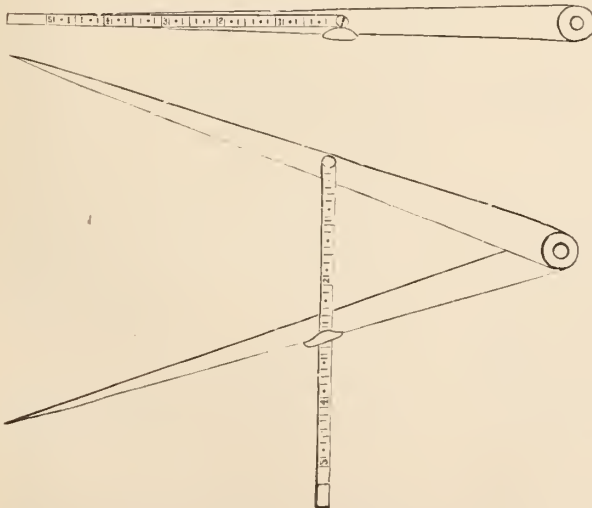


FIG. 2.—Hammond's Æsthesiometer. When closed it can be conveniently carried in the pocket.

and thus defeat the object of this test.

The suggestions previously made respecting the definite instructions to the patient, the use of blank experiments, and the employment of a bandage over the patient's eyes apply to this test as well as those previously described.

The following rules must be observed in case the æsthesiometer is to be used:

1. The two points of the instrument must be made to touch the skin simultaneously; otherwise the patient will detect the two points of contact more readily than if both met the skin at the same moment.

2. The contact should be a gentle one; otherwise the impression upon the skin becomes a painful sensation.

3. The relative position of the two points should always bear the same relation to the axis of the limb or the median line of the body, because the sensibility of a part is affected differently when the points are directed transversely or longitudinally. This is essential to the accurate comparison of the sensibility of different regions of the body, or of corresponding regions of either side.

4. The table which has been previously given should be employed as a standard of comparison

only when the sensory functions of the skin are impaired upon both sides. When the derangement is one-sided, the *healthy side* will be the safest guide for comparison.

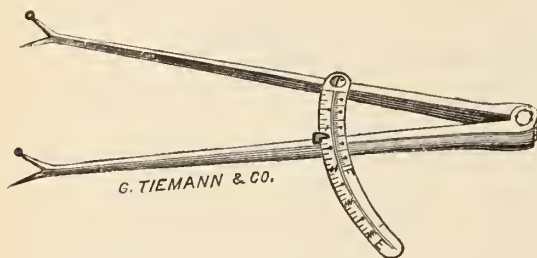


FIG. 3.—Carroll's Æsthesiometer. The instrument has two points upon each leg of the compass, one blunt and the other sharp. It is a convenient instrument to determine the condition of the sensory nerves in respect to contact sensations and those of pain. This is accomplished by simply substituting the blunt for the sharp points, or *vice versa*.

We are now prepared to consider the significance of the disorders of cutaneous sensibility, viz., anæsthesia or loss of sensibility; hyperæsthesia or increased sensibility; the existence of

rule, of both motor and sensory fibres. The fact that sympathetic nerve-fibres are also present in the majority of nerves, helps us to explain certain disorders in the nutrition of the skin that sometimes accompany motor or sensory paralysis dependent on injury or destruction of some individual nerve.

The regions of the spinal cord and brain that are *functionally associated with sensation* have been already touched upon. It may be stated in a general way that the nerve-fibres that conduct sensory impressions from the peripheral parts of the body to the brain travel chiefly through the *posterior columns* of the spinal cord and *its gray matter* in order to reach the brain—the seat of

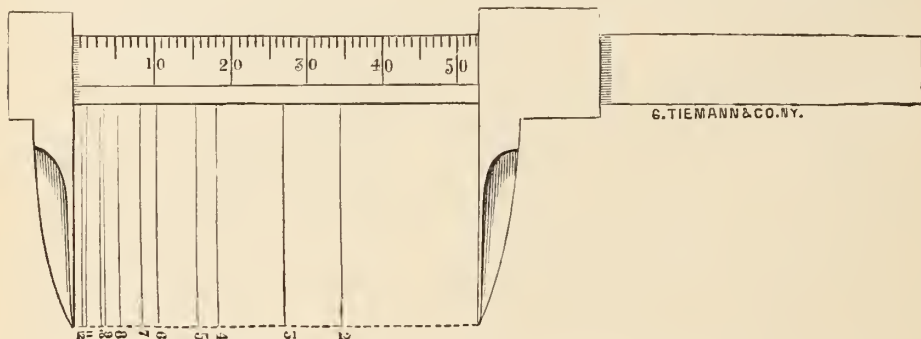


FIG. 4.—Sieveking's Æsthesiometer. A modification of the ordinary beam-compass employed by carpenters, but graded in inches and tenths of an inch. Its points are not sharp.

pain; and the lack of appreciation of varying degrees of temperature.

Anæsthesia.—Certain regions of the body may be deprived of cutaneous sensibility (either totally or partially) (1) by diseased conditions of the brain or spinal cord, and (2) by any abnormal state of the nerves themselves that tends to impair or destroy their ability to conduct sensations to the nerve-centres. In the latter case, the loss of sensation is liable to be associated with an impairment also of motion, because the cerebro-spinal nerves are composed, as a

intelligent perception of such sensations. Within the substance of the brain itself, these fibres pass through the *posterior part of the so-called "internal capsule"* of that organ. We are justified in drawing the following clinical deductions as regards the existence of cutaneous anæsthesia.

1. Lesions of the *cerebral hemispheres* produce anæsthesia when they involve the posterior one-third of the internal capsule. If the sensory cranial nerves are affected by such a lesion, the loss of sensation is commonly on the same side

as the lesion, except in case of the optic nerve (the condition known as hemianopsia). The anæsthesia of parts below the head, if due to cerebral causes, is confined to the side opposite to the hemisphere in which the lesion exists.

2. Anæsthesia from lesions of *one lateral half* of the substance of the spinal cord exists, as a rule, on the side opposite to the spinal lesion.

3. Lesions which involve *both lateral halves* of the spinal cord create anæsthesia on both sides of the body, provided the destructive process affects the so-called "sensory tract" of the cord, viz., the posterior columns, or the gray matter around its central canal.

4. Anæsthesia may exist *in the same side as a spinal lesion*, provided the posterior roots of the spinal nerves be pressed upon or destroyed by it, or in case the sensory nerves be affected by the spinal lesion before they cross to the opposite side of the cord.

5. Anæsthesia, unlike motor paralysis, is not necessarily present in all parts of the body supplied by those nerves that are given off from the cord below the seat of the lesion. Anæsthesia is often associated with a condition of increased sensibility or "hyperæsthesia" of parts below the seat of the spinal lesion, and on the side opposite to it.

6. Anæsthesia may often co-exist with other sensory symptoms, such as pain, incöordination of movement, the peculiar sensation known as "formication," numbness, tingling, and other subjective sensations.

7. Anæsthesia of spinal origin is *generally bilateral and symmetrical*, because lesions of the cord commonly affect both lateral halves.

8. Tactile sensibility may be destroyed by spinal lesions, and yet the sensibility to pain and temperature may oc-

asionally be retained. In rare cases, sensibility to temperature may be lost, and the sensibility to pain and touch may be normal. It is not infrequent for the neurologist to record an absence of sensibility to pain, when tactile sensibility remains unaffected, and accurate perceptions of temperature are still experienced by the patient. These subjects can detect a needle thrust into the muscles from a simple sensation of touch. These clinical facts seem to confirm the view that has been advanced by late physiologists, viz., that the paths of conduction of sensations of touch, pain and temperature probably lie in different parts of the spinal cord.

Hyperæsthesia. The skin may be rendered extremely sensitive in certain diseased conditions. This abnormal state of the nerves is termed "hyperæsthesia" in contradistinction to "anæsthesia," or a loss of sensation.

When the "sensory tracts" of the spinal cord are involved by a localized lesion the *parts below the regions rendered anæsthetic* (by the cutting of the sensory nerves) are usually affected with *hyperæsthesia*. The cause of this is not yet definitely known.

A narrow band of hyperæsthesia is also developed, as a rule, at the upper level of the spinal lesion. If in the dorsal region, this zone of hyperæsthesia generally encircles the body. When in the lumbar region, it is more or less vertical over the limbs in accordance with the particular spinal segment which happens to be affected.

Hyperæsthesia probably indicates, according to our present knowledge, some *irritation of the nerve-fibres* distributed to the regions so affected.

In the disease known as locomotor ataxia, after a paroxysm of "stabbing pains" has subsided, the seat of previous

pain becomes markedly sensitive to the touch, while the rest of the body is not similarly affected.

Hyperæsthesia may be of service in diagnosis. It may afford valuable information respecting the spinal segments that are *irritated* by some destructive process within adjacent regions of the spinal cord. Again, if limited to the area of distribution of some individual nerve, it may point most suggestively toward the existence of some local cause of irritation of that nerve itself. Finally, Valleix has pointed out the situation of certain regions in the course of the more important nerves of the body where extreme sensitiveness to pressure or touch exists in connection with neuralgic attacks. These are known as the "puncta dolorosa." They have been separately described by the author in his work, "The Applied Anatomy of the Nervous System."

Hyperæsthesia may be functional or organic. If *functional*, it is often due to some form of general spinal irritation; if *organic*, it is commonly associated with more or less anæsthesia. We meet the organic variety chiefly in connection with spinal meningitis, compression of the sensory nerve roots, and locomotor ataxia.

Delayed sensation. To the beginner in medicine as well as to the laity, nothing strikes the intelligence so forcibly as this symptom when well marked. Imagine a patient stuck with a pin, when unaware of its occurrence, and an interval of time (varying from one to thirty seconds) to elapse without any consciousness of the wound. Imagine the patient then suddenly becoming conscious of the injury with all the evidences of pain that should have occurred without any perceptible interval of time in a healthy subject. This is delayed sensation. It occurs chiefly in

connection with the disease known as "locomotor ataxia."

This symptom is to be interpreted as an evidence of imperfect conduction of sensation to the brain by means of the sensory nerves and the so-called "sensory tracts" of the spinal cord. The sensation is not arrested "in toto;" it is simply delayed. Complete abolition of sensation or "anæsthesia" is liable to be developed later—when the nerves or sensory tracts are so extensively involved as to be no longer able to perform the functions.

SENSIBILITY TO TEMPERATURE.—In testing this variety of sensibility, the precautionary steps previously mentioned in connection with sensory disturbances must be carefully observed.

Test-tubes holding water of different degrees of temperature are then applied to different regions of the body which have given previous evidences of sensory disturbances, and the patient's ability to discriminate between them with accuracy should be noted. The temperature of the test-tubes should be greater or less than that of the skin ($98\frac{1}{2}^{\circ}$), and of a uniform size. This prevents the confusion of simple "tactile" sensations with those of temperature. Breathing upon the surface of the patient answers as a rough test for the appreciation of heat.

SENSIBILITY TO PAIN.—The tests for this variety of sensibility comprise (1) pinching or pricking of the skin; (2) the application of extreme heat to the skin; and (3) the use of a powerful Faradic current upon the skin with dry electrodes. The patient *should never be prepared for this test*, as he may fail to give external evidences of pain from an assumed fortitude. Sensitiveness to pain and temperature may sometimes be affected when tactile sensations are not impaired.

Epilepsy Treated by Enemata.

Dr. AMBLARD, in two cases of epilepsy, administered bromide of potassium and chloral (3 jss. of each) in two injections, and found it to stop almost immediately the convulsions. He considers that this method has especial advantages.—*Revue Thérapeutique*; from the *Montpellier Médicale*.

Tetanus Treated with Quinine and Chloral.

Dr. JAMES H. TEBBETTS, of Chicago, Ill., relates the history of a child, two months old, who had pushed a carpet tack, with a leather head, up its nose. Several days later Dr. Tebbetts was called in and found the child in tetanic convulsions. It had had trismus for two days already. The tack was found wedged against the inferior turbinated bone and was extracted, when about a drachm of sanious pus and broken down tissue was discharged. The convulsions continued, the temperature was 106° F., and pulse 170. Eight grains of chloral hydrate and five grains of quinine were given per rectum, when the general convulsions ceased, but not the trismus. Next morning the temperature was 104°. Ordered three grains of chloral hydrate every three hours for twenty-four hours, and five grains of quinine every six hours per rectum. This last medicine was continued for three days; at the end of that time the temperature was normal and there was only a slight trismus. Dr. Tebbetts adds: "It would seem that in quinine we are to look for great assistance in these cases, and that, when given in full doses, even in children, the convulsions lessen in severity and may cease altogether. Toy-pistol tetanus, in the practice of Dr. Hosmer Johnson, has been cured by large doses of quinine, and Dr. Jones, of New Orleans, also reports recoveries

of cases of tetanus after large doses of quinine. In conjunction with chloral hydrate during and after the severer paroxysms, quinine seemed to hold the disease in check until the system had recovered its tone. Cinchonism did not appear."—*N. Y. Med. Record*.

Neuralgia Pencils.

So-called neuralgia pencils are being sold by a number of German pharmacists. They are said to consist of a mixture of menthol, thymol, and eucalyptol, fused and cast in small conic pellets which are fitted in suitable handles. The forehead and temples being touched with the pencil, a slight impression of burning is at first produced, which gives way to a pleasant cool sensation. Several pharmacists claim priority in the invention.

Lumbago.

Prof. DACOSTA recommended the use of the following, hypodermically, to frequently cure lumbago in two or three hours: \mathcal{R} . Atropiæ sulph., gr. 1-80; morphiæ sulp., gr. 1-6. M.—*Med. Bulletin*.

A Curious Case of Persistent Reflex Spasm of the Diaphragm.

Dr. A. L. RANNEY reports this case in the *Medical News*:

A case which I desire to bring before the notice of the profession was lately sent to me by Dr. L. M. Bingham, of Burlington, Vt., for diagnosis and suggestions as to treatment. Her history was as follows:

Miss E. W. Unmarried. Aged forty-four years. Her father died of cancer, complicated with phthisis, at the age of seventy; her mother died of heart disease at the age of thirty-five. She has three sisters living, all of whom are

"delicate and of a nervous temperament." Two sisters died of Bright's disease. One niece of the patient had chorea of a severe and persistent type.

As a child, the patient was afflicted with "extreme nervousness," but never had any marked symptoms of chorea. She menstruated at thirteen years, but was irregular until she reached the age of thirty years, since which time the menstrual function has been normal. Insomnia became developed as a marked symptom at the age of twenty years. It has persisted ever since, but with varying degrees of intensity. From youth she has been subject to more or less tremor of the hands, and has lately noticed that excitement markedly increased it. The tremor stops during sleep and does not cause her much inconvenience during the day. Neuralgic pains occasionally shoot into the hands and fingers, and are often experienced in the shoulders, back, and left side.

Four years before the date of my examination, she was attacked with *paroxysms of hiccough*. These have persisted throughout the past four years. The attacks come on in paroxysms which last from ten to sixty minutes. They are often so severe as to cause vertigo and symptoms of asphyxia. *They almost invariably follow movements of the upper extremities.* For that reason all manual efforts have been avoided for some years. The sweeping of a room will throw the patient into a severe paroxysm of hiccough. Sewing is rendered impossible for the same reason. Dressing the hair almost invariably induces an attack. Movements of the head, trunk, or legs seem to exert no influence upon the patient of a similar character.

Of late, neuralgic attacks have become more frequent and severe. The eyes have been affected with neuralgic

pains of a severe type, and also the shoulder of the left side.

On examination, no loss of muscular power was detected by me in either hand by means of the dynamometer. The condition of her body in respect to sensations of touch, pain, and temperature was tested and found to be normal. No painful points (the *puncta dolorosa* of Valleix) were detected over the seat of the neuralgic attacks. Pressure made over the spinous processes of the vertebræ produced no pain *except at one point*. This corresponded to the situation of the fourth, fifth and sixth cervical segments of the spinal cord. Here the patient suffered marked pain on pressure, and the skin was markedly hyperæsthetic. The patient stated, in reply to my interrogations, that this region had been the seat of a continuous "aching sensation" for the past four years. The superficial and deep spinal reflexes were normal. Co-ordination was performed perfectly in both the upper and lower extremities. The pupils were normal and responded perfectly to light and visual accommodation.

The condition was evidently one of abnormal excitability of the lower cervical segments of the cord, associated with general neurasthenia. The fifth cervical segment gives origin to filaments which enter into the formation of both the brachial plexuses and the phrenic nerves arise from the third and fourth segments as well. The case appears to justify the conclusion (based upon anatomical data), that the activity of the lower cervical segments (necessary to movements of the arms and hands) produced in adjacent segments of the cord an abnormal irritation of the cells associated with the physiological function of the phrenic nerves—hence the diaphragmatic spasm.

The patient was burned with the ben-

zine cautery apparatus over the cervical and dorsal segments of the cord, and ergot and bromide were ordered to relieve the local congestion of the cord that probably exists. This treatment had previously been tried for a short time with marked benefit, but had been discontinued when the symptoms exhibited amelioration. The effect of the continued use of the cautery has yet to be determined.—*Med. and Surg. Reporter.*

DISEASES OF THE URINARY ORGANS.

Directions for Making the Test Powders.

Preparation of the Materials.—Ferrocyanide of potassium (yellow prussiate of potash) and citric acid are the materials necessary for the preparation of the first test powder for albumen. I also employ milk sugar to mix with the above ingredients, for the double purpose of preventing the caking of the mass and to act as a preservative. It is added in the proportion of from one-sixth to one-fourth by weight. The formula I prefer is as follows: \mathcal{R} . Potass. ferrocyanidi, 4 parts; acidi citratis, 2 parts; sacchari lactis, 1 part. The materials are to be pulverized and then *thoroughly* dried by artificial heat. In the case of the milk sugar and citric acid, the heat should not be high enough to melt them. A convenient plan is to spread the powders on a board, and set on a stove or in an oven and gently heat until quite dry, then pulverize in a warm mortar and cork up in a dry bottle until needed. It will be found advisable to mix the milk sugar and citric acid powders when first dried in the proportion of one to two, and keep in this form in a tightly corked bottle. When it is desired to fill the small vial in the pocket case it is only necessary to weigh out four parts of potassium ferrocyanide and

three parts of the mixture of citric acid and sugar. For ordinary purposes it will be sufficient to measure out equal parts of the two powders from the stock bottles. The same remarks as to drying apply equally to the ingredients used in preparing the second formula. *Everything must be thoroughly dried.* After preparing the double iodide powder, it should be tried with water to see that it forms a clear solution. If a red precipitate remains a little more potassium iodide should be added until this will entirely dissolve.

Other test powders may be used, such as picric acid, trichlor-acetic acid, glacial phosphoric acid, etc., if desired.

Indigo Carmine.—Use the strongest commercial sulphuric acid to dissolve the indigo, aided by a gentle heat. Decant from the undissolved indigo before adding the sodium carbonate. All free acid must be neutralized, but avoid a great excess of sodium carbonate. Wash once or twice only with a solution of sodium carbonate, dry, and grind up with perfectly dry sodium carbonate.

Painful Urinating.

The following is a good prescription for painful urinating: \mathcal{R} . Sodæ bicarb., \mathfrak{z} iij.; tr. hyoscyamii, \mathfrak{z} j.; spt. nit. dulc., \mathfrak{z} j.; aq. menth. pip., \mathfrak{z} iv. \mathcal{M} . Sig.—Teaspoonful in a little gum Arabic water three times a day.—*Med. World.*

Dysuria.

\mathcal{R} . Potas. brom., \mathfrak{z} jss.; tinct. bellad., \mathfrak{z} ss.; spr. nit. dulc., \mathfrak{z} jss. \mathcal{M} . Sig.—For an adult, one teaspoonful three (3) times a day.—*Id.*

Diabetes Mellitus.

\mathcal{R} . Fl. ext. lycopus virg., \mathfrak{z} j.; fl. ext. rhus aromaticus, \mathfrak{z} j.; fl. ext. mangifera indica, \mathfrak{z} j. \mathcal{M} . Dose.—Teaspoonful in water thrice daily.

DIGESTIVE TRACT.

The Nutritive Value of Branny Foods.

In a paper on this subject, read before the College of Physicians, of Philadelphia, the authors, Drs. N. A. Randolph and A. E. Roussel, sum up the following deductions from the facts, old and new, which have been presented to them:

i. The carbohydrates of bran are digested by man to but a slight degree.

ii. The nutritive salts of the wheat grain are contained chiefly in the bran, and, therefore, when bread is eaten to the exclusion of other foods, the kinds of bread which contain these elements are the more valuable. When, however, as is usually the case, bread is used as an adjunct to other foods which contain the inorganic nutritive elements, a white bread offers, weight for weight, more available food than does one containing bran.

iii. That by far the major portion of the gluten of wheat exists in the central four-fifths of the grain, entirely independent of the cells of the fourth bran layer (the so-called "gluten cells"). Further, that the cells last named, even when thoroughly cooked, are little, if at all, affected by passage through the digestive tract of the healthy adult.

iv. That in an ordinary mixed diet the retention of bran in flour is false economy, as its presence so quickens peristaltic action as to prevent the complete digestion and absorption, not only of the proteids present in the branny food, but also of other food-stuffs ingested at the same time.

v. That, inasmuch as in the bran of wheat, as ordinarily roughly removed, there is adherent a noteworthy amount of the true gluten of the endosperm, any process which, in the production

of wheaten flour, should remove simply the three cortical protective layers of the grain would yield a flour at once cheaper and more nutritious than that ordinarily used.

Hypo-nitrous Acid a Remedy in Cholera.

Dr. ROMAN DE LUNA has published the following observations (Arch. d. Pharm., June, 1884.) which he made during the epidemic of Asiatic cholera in Madrid, and last year in Manila.

The infectious element of cholera contaminates the atmosphere, and thus infects persons and inanimate objects. The infection takes place solely by the respiratory passages, and especially during the period of rest, *i. e.* while the individuals are asleep. The microbe acts mainly on the blood corpuscles, prevents the formation of blood, and thus causes a kind of suffocation, at last ending in death. The sole remedy for cholera patients in the cold stage consists in the inspiration of air, which is cautiously mixed with the vapor of nitrous acid (subnitric acid—*unter salpeter säure*).

In the cases reported by L., two or three inhalations generally sufficed to produce a great amelioration of the threatening symptoms and to induce reaction, and a few hours later the patients were free from danger. As a preventive remedy, L. recommends, therefore, the fumigation of inhabited rooms twice daily, every morning and night. During the terrible epidemic of Asiatic cholera in Manila last year, of the 300 men working in the mint of Manila and exposed to the influence of nitrous acid vapors not a single one became affected with cholera—a fact which, considering the spread of the disease in that locality, would, if true be almost convincing of the preventive and the curative action of nitrous acid—*Lh.*

CONSTITUTIONAL DISEASES.

Thermic Dyspnea.

The mode of action of heat in increasing the frequency of respiration has received different explanations at the hands of various authors. Ackermann, Goldstein, and others have explained the respiratory acceleration as due to warming of the central nervous system. M. Sihler has supported the doctrine of a reflex action, the afferent surface being the peripheral cutaneous nerves. M. Ch. Richet has recently communicated the principal conclusions at which he has arrived to the Academie des Sciences. When a dog has been tetanized by repeated strong electrical shocks, the temperature of the animal is elevated and the rate of respiration is increased. As soon as the temperature has passed beyond 40.5°C . (104.9°F .), the respiratory rhythm is accelerated to 200, 300, or even 340 respirations per minute. From this experiment Richet concludes that thermic dyspnea may be of central origin and due to the heating of the blood and nervous system. But Richet also believes in a reflex thermic dyspnea, as he appears to prove by placing dogs in a warm stove, the temperature of the internal viscera remaining normal when the atmosphere of the stove is 38° , the respiratory rhythm being raised to 300 or more per minute. This reflex thermic dyspnea is not observed in man, in whom the skin is more fitted for transpiration. Richet has found that a muzzled dog soon became feverish when placed in a warm stove; for example, the stove at 39° , the temperature of the dog became 42° in an hour. Even tracheotomy and the use of a cannula in a muzzled dog did not prevent the onset of a marked

pyrexia, and the animal died asphyxiated; hence normal respiratory movements are insufficient to support life when a dog is placed in a hot medium. Choral in an anesthetic dose, abolishing all the reflexes does away also with reflex thermic dyspnea; the chloralized dog placed in the hot chamber, being unable to breathe faster, becomes overheated and dies. Morphia, even in large doses, does not prevent the respiratory acceleration. In order that the inspirations may be increased in frequency, it is necessary that the trachea be largely opened, so that there is no resistance to free inspiration and expiration, whereby the tension of carbonic acid in the lungs may be reduced. If the surcharge of carbon dioxide be too great, respiration becomes deep and slow. Then there is an asphyxial dyspnea characterized by slow and deep inspirations, while the thermic dyspnea is marked by rapid and superficial inspirations. Though chloral gets rid of the reflex thermic respiratory acceleration, it is powerless over the thermic dyspnea of central origin. No reflex excitation seems to be able to prevent the occurrence of the central form of dyspnea, while the reflex form appears to be under the control of the will, and of all peripheral stimulations; for example, cold water affusion. The central form is said to persist, even after the temperature has returned to the normal, the respiratory center in the medulla not having lost its newly acquired rhythm, though cold water applications are then able to restore the natural rhythm.—*Lancet*.

Ergot in Typhoid Fever.

In the *Medical Review* of August 30, a report on the successful treatment of typhoid fever with ergot at a French

military hospital was given. We note since in the *Centralblatt für Klin. Med.*, No. 34, that Dr. Kobert, of Strasburg, warns against such a procedure. Kobert claims that he has found a substance in ergot that he calls sphaceline acid. This, he says, produces intestinal lesion similar to that found in abdominal typhoid. For this reason he advises against such treatment.—*Weekly Med. Review.*

Lemon Juice in Malaria.

We have already noticed the recommendation of Dr. Tommasi Crudelli, of Rome, in reference to the use of lemon juice in malaria. Before the last International Medical Congress, this Professor gave the following directions for preparing the remedy. A lemon is cut up, peel and all, into thin slices, which are then put into three glassfuls of water, and the whole boiled down to one glassful. It is then strained through linen, squeezing the remains of the boiled lemon, and set aside for some hours to cool. The whole amount of the liquid is then taken fasting. Dr. Mascagni, of Italy, has succeeded with this remedy in curing an obstinate case of malaria in his own person, that had resisted quinine. It is well known that in Italy, Greece, and North Africa, they often use lemon juice or a decoction of lemon seeds, as a remedy in malarial fevers of moderate intensity; and in Guadaloupe they use for the same purpose a decoction of the bark of the roots of the lemon-tree. All these popular practices tend to show that the lemon-tree produces a febrifuge substance, which resides in all parts of the plant, but which would seem to be most abundant in the fruit. In fact, among the popular remedies employed against malarial infection, this is the most efficacious, for it can be em-

ployed with good effects in acute fevers. But it is especially advantageous in combatting the chronic infection, which is rebellious to the action of quinine, and in removing or moderating its deplorable effects.

Peptonuria as a Symptom of Different Diseases.

The following conclusions, taken from the work on this subject by Dr. FENOMENOW, have great importance for the practicing physician:

1. Peptonuria always occurs in the final stage of croupous pneumonia, and is in direct relation to the absorption of the croupous exudation.

2. The presence of peptone in the urine in cases of nephritis is perhaps dependent on the peptonization of the tube-casts.

3. In pulmonary phthisis, the peptonuria is dependent not upon the extent of tissue implicated, but upon the rapidity of the destructive process.

4. In typhoid fever accompanied by constipation and a temperature above 40° C., peptonuria is a frequent appearance.

5. Occasionally peptonuria occurs in scarlet fever, in exudative pleurisy, in nephritis, in puerperal disease, and in disturbances of compensation in heart diseases.—*Deutsche Med. Zeitung.*—*St. L. Med. & Sur. Jour.*

Some Points on the use of Heat and Cold in Therapeutics.

Dr. JAMES B. HUNTER (*N. Y. Medical Journal*): Typhoid fever, perhaps better than any other disease, illustrates the good effect of antipyretic treatment. Dr. G. L. Peabody, in a valuable statistical paper on the treatment of typhoid fever, says: "The effect of

high temperature is very deleterious upon normal tissues, and its influence is distinctly evil in reference to the possible healing of intestinal ulcers." As the result of his own experience, and a careful examination of the records of the treatment of typhoid fever in seventeen large hospitals, in this city and in Europe, those of the British army and navy, and of our own army, Dr. Peabody emphatically endorses the use of cold water in the treatment of that disease. He shows the mortality to be only seven and one-fourth per cent. in a series of over eight thousand cases: and a series of two hundred and eleven cases in Dr. Brand's private practice all recovered under the antipyretic treatment. Dr. Peabody laments the difficulty of introducing the practice generally, the necessary appliances being cumbersome and expensive. The effusion of cold water he has not found satisfactory; the cold coil he considers unsuitable; and the cold bath the only really efficient method. Now, a cold bath in the immediate proximity of a patient sick with typhoid fever is not often obtainable. The patient may be sick in a country house, where bath-tubs are unknown; in a hotel, where they are fixed and remote from the patient's room. Even in a private house with all modern appliances it is not an easy matter to transfer a patient from a sick-bed to a bath-tub and back several times a day without a good deal of disturbance to the patient, and an abundance of physical help. I would therefore suggest as equally efficient and far more practicable the use of the well-known but somewhat neglected Kibbee fever-cot, or something equivalent to it. This cot, which was first devised and used by Dr. Kibbee for the treatment of scarlet fever, during a severe epidemic of that disease, consists essentially of a common

cot or frame on which is stretched strong canvas or other material sufficiently coarse or open to permit water to pass through it. Under this is placed a rubber sheet, to catch and convey the water to a pail placed at the foot of the bed. The patient lies comfortably on this bed, on a blanket and sheet, but of course without mattress. Such a bed can be improvised almost anywhere at a very small expense. I once made a very efficient one, in the country, with an old coffee bag; and I once used an ordinary wire mattress. Any cot covered with canvas may be made available as a water-cot by cutting a sufficient number of holes in the canvas. When it is necessary to apply the cold water, the covering of the patient is removed from the body (not from the extremities), which is enveloped in or covered by a sheet; upon this sheet warm or tepid water is poured gently from a pitcher or watering-pot; the temperature of the water is then gradually reduced until it is sufficiently cold. The stream is kept up for ten or fifteen minutes, a dry blanket is then thrown over the patient, and sleep generally follows.

Having had considerable experience in the use of this method of reducing the temperature in cases of peritonitis and septicæmia following operations, and some experience with it in typhoid fever, I know it to be very easily managed, to come within the skill of any intelligent nurse or attendant; and that by its means the temperature can be reduced to any desired point and maintained there. The apparatus is simple, it requires but a small quantity of water, it involves no movement of the patient, and occasions no shock whatever. I therefore believe it to be the best means available in all cases of fever where artificial reduction of the temperature is desirable. This method was adopted

very successfully by Dr. Thomas, for peritonitis following ovariectomy, in 1876.

Next in point of efficiency, for the same purpose, I would class the wet pack, by which I mean a folded sheet, wrung out of tepid or cool water, and wrapped quickly around the patient's body. In this case cooling takes place partly as a result of evaporation. If the attendants are industrious, much may be accomplished by the use of towels wrung out of cold water placed upon the body and limbs, and frequently changed. Least useful of all, though very grateful to the patient, is sponging with cold water. If done often enough some heat is abstracted, and if alcohol is used with the water evaporation aids in cooling.

Where it is necessary to effect a local reduction of temperature, there are better means than the fever-cot. In threatening peritonitis after laparotomy, for instance, the use of a coil of lead or rubber tubing, through which water of any temperature may be continuously passed, affords a perfectly simple and efficient means of accomplishing the purpose desired.

M. Galante, of Paris, 1852, devised a rubber apparatus for continuous irrigation of the eye. Dr. Petitgand, of Paris, had manufactured for him an apparatus of rubber tubing for this purpose in 1859; and in 1866 he published a description of a head-cap made of rubber tubing for the use of cold water, and a *sachet*, a flat coil of rubber tubing precisely similar to the abdominal coil now in use. In 1879 Dr. Dumontpallier published a description of a series of tubular covers and mattresses, by the use of which, according to experiment, he claimed to be able to accomplish much more rapid and uniform refrigeration in typhoid, varioloid, and other fevers, than could be accomplished by the cold baths of Brand.

The use of the head coil of lead or rubber is now very general; and the abdominal coil is likewise becoming popular. Nothing can be simpler or less disturbing to the patient than the use of the abdominal coil, and in incipient peritonitis nothing that I am aware of is so efficient. The application of the rubber coil to this particular class of cases was suggested by Dr. A. B. Townsend, in the Woman's Hospital, in 1881. The coil is applied directly to the skin, or a thin towel is interposed. A bandage is then placed around the body to keep the coil in place; a pail of water, containing a lump of ice, stands on a table near the head of the bed, and a pail under the bed receives the water as it passes through. At the latter extremity, where the water escapes, there is a stop-cock by which the flow may be nicely regulated or entirely stopped, as may be rendered necessary by the temperature of the patient, as shown by a thermometer placed in the axilla from time to time. Unless the apparatus should be irksome to the patient, which is seldom the case, it is not necessary to remove it as long as there is any likelihood that it may be required. By simply opening the stop-cock the flow of water begins, and the cooling process may be stopped or resumed without waking a sleeping patient.

I have used in the manner just described both the rubber coil and the coil of fine leaden tube known as Leiter's coil. The latter have not been generally in the market, or I think they would have taken the place of the rubber in many cases. They are not so heavy, when full of water, as the rubber coil; they are not liable to become dirty, and have not the unpleasant odor of rubber. They are more durable and less expensive. They are not more liable to become clogged with dirt, if the precaution is

taken to envelop the receiving end of the tube in a piece of gauze or coarse muslin, which should be done in all cases. With this precaution, and one nurse of ordinary intelligence, I have sometimes kept the leaden apparatus in use for three days and nights without a moment's interruption. One advantage of the metal coil is that it requires less water, and that it is seldom necessary to use ice. Being a much better conductor than the rubber, the use of water at a temperature of 45° or 50° is quite sufficient. I consider these appliances of the greatest possible value where inflammation is threatened, and most important means of limiting inflammation when it has developed. In case of bad operations, where there is every reason to expect peritonitis, I have the coil placed upon the patient immediately after she is put to bed, so that it may be ready for use at any moment. In ordinary cases I wait until the temperature rises above 100° in the axilla.

In the method spoken of the object, of course, is to reduce bodily temperature; but cold is sometimes used as a means of impressing the nervous system. Chapman's ice-bags act on this principle, and have been found useful in many nervous disorders. My own experience with these ice-bags has been limited chiefly to their application in cases of painful and scanty menstruation. In a certain class of cases the application, for half an hour at a time, of a bag of crushed ice to the region of the lumbar vertebræ and sacrum, has the effect of promoting the menstrual flow. Applied to the dorsal vertebræ, in an anæmic patient with cold extremities, the tendency of the ice-bag is to equalize the circulation and promote warmth throughout the whole body.

Friction with ice is employed in frost-

bite. The late Dr. Peace, of Philadelphia, claimed to have had excellent results, in a cholera epidemic through which he passed in Europe, from vigorous frictions of the limbs and body with lumps of ice. Where it is necessary to stimulate the nervous system, the alternate application to the spine of a flat brick of ice, and a very hot iron, protected by flannel, is sometimes very effectual.

I shall merely allude to the popular and time-honored belief in the styptic effects of cold; to the undoubted value of cold for the relief of pain and burns; and to the efficacy of ice-cold applications in the causalgia consequent on injuries of the nerves from gunshot wounds.

II. Of the manifold forms in which heat is employed as a remedy for pain and disease, I shall dwell on a few only of the most striking, at the risk, as in what I have said of cold, of telling a thrice-told tale. For the arrest of hemorrhage a high degree of heat has been long in vogue. The hot iron has held its place as a styptic probably for many centuries; and the cautery in some form is still constantly employed for the same purpose. The use of a moderate degree of heat for the arrest of a more general hemorrhage is of recent origin. To Dr. Emmet we are indebted for having demonstrated the hæmostatic properties of hot water. Where ice and cold water were formerly used, hot water is now found to answer a better purpose. In hemorrhage from the uterus after miscarriage, or after removal of a fibroid, or from any other cause, injections of very hot water at the same time arrest hemorrhage and promote contraction of that organ. This is one of the many applications of heat where experience has placed its value beyond a doubt. For the arrest of hemorrhage from an

exposed surface, towels dipped in very hot water and pressed firmly on the bleeding part for a few minutes will generally act much more promptly and permanently than cold water used in the same way. A stream of very hot water thrown with a syringe into any bleeding cavity, if there are no vessels of large size, will generally prevent further flow of blood. The remarkably good effect of hot water for this purpose, during and after operations, may be witnessed every day in many of our hospitals. One great advantage, if there were no other, in favor of the use of hot water for exposed surfaces, or for the uterine cavity, is that the process of boiling is purifying, and one of the most reliable means of destroying organic matter, bacteria, or other minute organisms which are believed to play so destructive a part in the human body. A higher temperature than that of boiling water has been proven to destroy some germs which escape simple boiling. For that reason I always, if practicable, employ for antiseptic solutions and for surgical purposes water from the boiler of a steam engine, which has usually been heated to about 250°.

The beneficial effects of vaginal injections of hot water are now generally appreciated, and form an important part of every-day gynecological treatment. So much depends upon the manner in which these injections are given, that I will venture to describe the method I consider the best. The patient should lie flat upon a bed or sofa, with the hips raised upon a broad bed-pan, capable of holding four or five quarts of water. With a Davidson's syringe, having a hard-rubber nozzle not perforated at the extremity, a stream of water as hot as can be borne, from 100° to 110°, should be gently thrown into the vagina for ten or fifteen minutes, or until three or four

quarts of water have been used. The Davidson's syringe is better than the fountain; a bed-pan without pipes or openings or stop-cocks is better than a more complicated apparatus. It is difficult to keep the simplest vessel of the kind clean, and almost impossible some of the more complicated ones.

The effect of injections given thus night and morning is often quite surprising. The hot, swollen, congested mucous membrane of the vagina assumes a normal appearance, the offensive discharge ceases, the extreme tenderness disappears, the engorged cervix softens and diminishes in size, there is a marked general improvement without any medication whatever, and the patient has made a great step toward getting well. I make a rule of questioning a patient in detail as to whether she has taken her injection thoroughly. A pint or two of lukewarm water feebly thrown into the vagina, while the patient is sitting over a basin or other vessel, is often considered sufficient and expected to yield good results; but such a use of hot water for this purpose resembles the proper injection only "as the mist resembles the rain," and leads only to disappointment. In pelvic cellulitis the persistent use of hot water hastens the absorption of the plastic exudation and shortens the duration of the disease.

One of the applications of heat that may appear paradoxical, in view of what has been said of refrigeration in peritonitis, is the very common custom of covering the abdomen with hot poultices for the relief of the same disease. There is really nothing antagonistic in this. The object of the hot application is not to augment the heat of the parts, for there is already too much heat and congestion, but what the poultices and hot fomentations do is to stimulate the capillary circulation and that of the under-

lying lymphatics, and thus relieve the engorgement of organs more remote. Such applications are grateful to the patient, and that they often do much good there can be no doubt. I think that warm applications are useful, chiefly in the forms of peritonitis that develop rather insidiously, with pain over a large area. Where the disease is local, and especially of traumatic origin, I should prefer cooling measures from the beginning. There is nothing at all inconsistent in the use of both hot and cold applications at different stages of the same disease, and in the same case.

Incompatibility of Sulphate of Quinine and Iodide of Potassium.

In a communication to the Biological Society, M. Rabuteau calls attention to the ill effects of iodide of potassium and sulphate of quinine, when administered together or at short intervals. These effects are, on the part of the digestive organs, anorexia, nausea, epigastric pain, colic, and sometimes vomiting; on the part of the general system, *malaise*, slowing and feebleness of the pulse, pallor, and sense of fatigue. These results are due to the decomposition of the iodide and the liberation of free iodine. This decomposition takes place, not alone in the stomach, but goes on in the intestines also. The same result occurs from the use of an iodide sophisticated with an iodate of potassium. Iodine is set free, and to the action of this is to be referred the local and systemic effects above mentioned.—*Med. News.*—*Amer. Jour. Pharm.*

Intermittent Fever.

R Quin. sulph. ʒ ss.; acid hydrobrom., ʒ i.; tr. nucis vom., ʒ ss.; syr. tolut., ʒ ss.; aq. ad., ʒ ij. M. sig. ʒ i four times a day.

The Use of Arsenic in Pulmonary Tuberculosis.

According to the "*Centralblatt für klinische Medizin*," Stintzing has tried the arsenic treatment at von Ziemssen's clinic in sixteen cases, two of which have proved fatal. In one of these cases the drug could be employed only for eleven days, and in the other only for three weeks. In but four cases was there any noticeable lowering of the temperature; in eight, it was entirely unaffected; and in one case, the drug even seemed to raise it. In three cases there had been no fever. In only one instance was there any diminution of the dyspnoea, of the cough, or of the expectoration. The frequency of the pulse was maintained in four cases, increased in six, and decreased in two. Nutrition was not increased in a single instance; the weight of the body remained the same in two cases, and sank in nine, while two cases of apparent gain were accounted for by a highly dropsical condition. In no case was there a subsidence of the local processes in the lungs, but in eleven they advanced notably. The breathing capacity was repeatedly measured in twelve cases; four of the patients improved a little in this respect, but this did not seem very certain, for, on account of the patient's awkwardness, the early measurements were thought to have been too low; in two cases the capacity remained the same; and in six it was evidently diminished. The number of bacilli found was unaffected in seven cases, and increased in three; in only one was it diminished, and that several weeks after the use of the remedy had been discontinued.

Nephritic Affection in Diphtheria.

J. FISCHL (*Prag. Ztschr. f. klin. Med.*): Symptoms of acute Bright's disease

are rarely met with in diphtheria, even simple albuminuria is not usually found in fatal cases; while albuminuria is sometimes seen in mild pharyngeal cases, it is frequently absent in the very grave ones, though complicated with high degree of stenosis of the larynx. The morphotic elements found were: free hæmoglobin, a considerable quantity of leucocytes, cylindroids, but no micro-organisms.

Quantity of urine in 24 hours diminished, specific gravity 1,006.

Anatomical changes were the following: In the arteries, anomalies of the adventitia, agglomeration of cellular tissue on the outside of the muscularis, and an increase of fibres. Similar relation were seen in the kidneys of scarlatinous patients. The arteries showed also changes in the intima, consisting in enlargement and desquamation of the endothelia. In the veins, besides perivenous accumulation of round cells, he saw their increase within the vein, so as to cause a thrombosis. In the capillaries also was found an accumulation of round cells.

Changes in the malpighian bodies were manifested by: 1. Swelling of the epithelium of the capsule. 2. Fatty degeneration of the capsule and glomerular epithelium. 3. Proliferation of the capsule-epithelium near the periphery. 4. Accumulation of epithelial cells between capsule and glomerule. 5. Hyaline degeneration of the capsule. 6. Amyloid degeneration of the malpighian bodies. 7. Metamorphosis of the latter into hyaline balls.

Atrophy of the malpighian bodies does sometimes occur, especially those near the renal capsule.

Changes in the tubuli uriniferi and their lining membrane were: 1. Enlargement of the tubuli contortis. 2. Swelling of the epithelium of the same.

3. Fatty degenerescence of the same.
 4. Occlusion of the same by red blood corpuscles, round and polygonal cells.
- St. Louis Med. and Surg. Journal.*

Prophylactic Value of the Vapours of the Essence of Turpentine in Diphtheria.

(*Gaz. Medicale.*) The essence of turpentine in vapors is useful in the treatment and prophylaxis of diphtheria and of exanthematous diseases.

Dr. VILANDT has never seen a child affected with any of these diseases, communicate them to any other person, where this proceeding has been followed. Segregation is frequently impossible; the mother may be the only nurse, and she may have to see to the wants of others, the well members of the family, and thus oscillate between one and the other. Pour 20 to 40 drops of mixture of equal parts of essence of turpentine and phenic acid in a vessel of boiling water; place it on a gentle fire, in a manner to saturate the air in the sick-room with the vapors of these two substances. It has a good effect upon the exudation of diphtheria, but it does not exclude the use of other remedies. This remedy is extensively used in the children's hospital, by M. Bouchut.

Suppurative or Purulent Pleuritis.

Dr. GEO. T. MCCOY thus concludes an interesting article in *Louisville Med. News*:

The diagnosis of pleuritis can generally be made if we pay very careful attention to the history of the case, and carefully watch its course. Mistakes, however, do occur. It is liable to be confounded with other inflammatory diseases when its symptoms are masked, or when they correspond to the symptoms of other diseases. When the ef-

fusion is small the diagnosis is difficult. When situated in the left side it may be mistaken for pericarditis; may be mistaken for simple hydrothorax. The most common mistake is confounding it with pneumonia. Hospital autopsies show that this mistake is frequently made. A professor of pathology in one of our prominent colleges once said to the writer that the mistaking of one of these lesions for the other more frequently occurred than almost any other mistake in the practice of medicine. In each of my cases pneumonia had been diagnosed as preceding the pleuritis. Pleuritis was probably the primary lesion in all, pyemia having something to do with its development in Case II.

Careful auscultation with suspended respiration will generally decide between a pleuritis and pericarditis with effusion. Hydrothorax develops slowly, not attended with fever, generally double, evidences of compression occur late in the disease, is accompanied by general dropsy, and we have also chronic and cardiac diseases.

From croupous pneumonia the diagnosis is not so easy, the two diseases often existing at the same time. The crepitant râle and rusty sputum of the one, and the friction-sound and stitch in the side in the other, when well marked are sufficient to discriminate between them. These are not of constant occurrence, therefore we have to rely upon physical signs. The dullness over the chest in pneumonia is not so positive; it usually follows the interlobular fissure, and extends from the fourth costal cartilage to the axilla, position having no effect on this line of dullness. In pleuritis, we have absolute dullness, and the boundary is changed by position, unless circumscribed. "In pneumonia we have bronchial breathing, bronchial voice, and increased fremitus.

In pleuritis absent respiration, absent voice, and absent fremitus." (Da Costa.)

After making a diagnosis of pleuritic effusion, can we determine its character? Is it fibrino-serous, purulent, or hemorrhagic? Careful attention to the course of the disease is of great assistance in making a diagnosis. When the temperature of a primary acute pleuritis remains for four or five weeks at about the same stage, morning 99° , evening $102-4^{\circ}$, and this intermittency is regular, it is presumable that the pleuritis is purulent. The temperature of the affected side is said to be increased, and a persistence of this, with the foregoing symptoms, and associated with debility, emaciation, edema of the subcutaneous tissues of the dependent parts of the body, connected with long duration of illness, all point out purulent effusion of the chest. The pulse in purulent effusion is 110 to 120, in the simple form 100 or less. Puncture, with an exploring needle or hypodermic, will decide the point, and ought always to be made. If thrust in quickly the patient will not heed it much, and when withdrawn the character of the fluid can be determined.

In perforation into the bronchi, or a "paracentesis from necessity," the diagnosis is made from the character of the discharge and the expectoration.

The earlier the operation is performed the more certainly will the lung regain its former elasticity, and such sequels as pleuritis deformans will occur less frequently. We also avoid permanent displacement of organs, and the liability to perforation in unfortunate directions should not be lost sight of.

Removal of a part of the fluid only will stimulate absorption, which before would have been impossible from compression of lymphatic vessels. Nature

does not often relieve an empyema in so favorable a manner as in Case 11, and the physician who awaits such a favorable termination will often be disappointed. Opening directly into the bronchi, and death by suffocation is not a very unusual occurrence.

I will bring this paper to a close by simply adding the rules laid down by Dr. Anstie for deciding upon an operation :

1. In all cases of pleurisy, at whatever date, where the fluid is so conspicuous as to fill one pleura and begins to compress the lung of the other side. In such cases there is danger of fatal orthopnea.

2. In all cases of double pleurisy, when the total fluid may be said to occupy a space equal to half the dimensions of the two pleural cavities.

3. In all cases of large effusion where there have been fits of orthopnea.

4. In all cases where the contained fluid can be suspected to be pus an exploratory puncture must be made. If purulent, the fluid must be let out.

5. In all cases where a pleuritic effusion occupying as much as half of one pleural cavity has existed for so long a period as one month and shows no sign of progressive absorption.

From history of Case III. I am led to believe that it was a retained fibrinous pleurisy, and had only recently become purulent.

Iodized Collodion in Erysipelas.

DR. B. FRANK HUMPHREYS (*Nashville Journal of Medicine*): I am aware that anyone, except myself, has ever used iodized collodion in erysipelas. I have been using it as a local application in erysipelas for more than five years, with uniform success.

A photographic artist was about to

cast out a large bottle of iodized collodion, as it was not pure enough for his purpose. I interposed, whereupon he gave it to me. It was not long until I had an opportunity to try the remedy upon a little girl, who had a severe attack of erysipelas upon her arm. Soon after this the mother had an attack of the same disease, on both of which the iodized collodion was used successfully. Of course the constitutional treatment was not neglected,

Since then I have used it without a single failure, during which time I have had some very obstinate cases. It is applied with a camel's-hair pencil or a feather, as often as desirable.

Upon evaporation of the ether, there is a feeling of coolness and ease, after days and nights of suffering.

The following formula, for making the iodized collodion, is taken from *Waltz's Photographic Rays of Light*, Volume 1, Number 1, January, 1878, page 12: R. sulphuric ether, 3 x; alcohol, absolute, 3 x; gun cotton, 3 ij. Mix, and when dissolved, add: Iodide ammonium, grs. 80; iodide cadmium, grs. 40; bromide cadmium, grs. 40. Mix and bottle tightly for use.

As the salts of cadmium may not be readily obtained in country drug stores, it is highly probable that two drachms iodide ammonium and two scruples bromide potassium or ammonium added to the three first articles would prove as efficient as the formula given above.

Hydriodic Acid in the Treatment of Acute Inflammatory Rheumatism.

DR. JAMES CRAIG, of Jersey City, N. J., writes as follows to the *Medical Record*:

"Before using the remedy shortly to be spoken of, I was in the habit of prescribing bicarbonate of potassa, which,

as a rule, gave relief as soon as the urine was rendered alkaline, which required about a week or ten days, and during that time opiates had to be given to relieve pain and produce sleep. I have also prescribed salicycle acid, but cannot say that I have seen any decided benefit derived from its use.[!] Syrup of hydriodic acid, prepared by Robert W. Gardner, New York, is the remedy *par. excellence* for this painful and troublesome affection. I have used it for the past two and a half years in bronchitis and scrofula, but its effects have been most prompt in acute inflammatory rheumatism, relieving pain in from twelve to forty-eight hours. I have been called to see patients suffering from this affection, and found them with high fever, joints swollen, and suffering terribly, and on the following day have been agreeably surprised at their rapid improvement, finding them in a great measure free from pain, and fever reduced. Some other cases take a longer time, but I have yet to find one that was not in a comfortable condition within forty-eight hours. The dose I prescribe for adults is from two to three teaspoonfuls every two or three hours, in a wineglass of water, until relieved; afterward I reduce the dose to one teaspoonful, which may be continued for five or six days, at longer intervals. I was first led to the use of this remedy in prescribing for a patient suffering from bronchitis complicated with rheumatism, its effects being most salutary in the relief of both diseases. I should state that under this mode of treatment the heart has been free from complications—the remedy preventing the exudation and organization of plastic material. I more frequently use it now in rheumatism than in bronchitis—in fact, I use it in all cases of acute rheumatism, and must say have always been

pleased with its results. I have also prescribed it in chronic rheumatism, but with less effect. I hope that other physicians will give it a fair trial, and find it as useful in their hands as it has been in mine."

Rain-Water.

Good water should be (1) at all seasons clear, transparent, bright, and when seen in large bulk, pure blue, the natural color of uncontaminated water; (2) it should be well aerated, holding in solution from seven to eight cubic inches of air per gallon, consisting of two or more cubic inches of oxygen and six of nitrogen; (3) it should have at its source a uniform temperature equal to the average of the climate for the year; (4) it should be free from living organisms, vegetable and animal, and from all dead, decomposing, organic matter, and should not dissolve lead; (5) it should hold only a moderate quantity of mineral matter in solution, and thus be soft, and not deposit a coating of lime or magnesia when boiled.

Now, rain-water is only pure the moment it leaves the clouds. In passing through the air it absorbs gases, takes up floating organic particles, especially near towns, as shown by Dr. Confield, by actual experiment, a half a mile from Manchester. These impurities from atmospheric sources, except in cities, are not excessive, yet care should be taken that they are not accidentally augmented, as when the first washings of the roof after a dry spell are allowed to go into the tank. To obviate this, three tanks are used in Italy, where the water is required for drinking purposes. Our own ruder tanks are plainly unfitted for the preservation of drinking-water. Rain-water, in proportion to its purity or softness, is more likely than hard

water to dissolve lead. So leaden cisterns and fittings of all kinds are sometimes a source of danger. Thus rain-water does not satisfy the third or fourth of the above conditions of excellence, and because of its containing an insufficient quantity of salts, the fifth also. This lack of salts gives it an insipid taste, which, aside from the objections stated, makes it not the best for drinking. But, wherever convenient, rain-water should be kept as a reserve supply for drinking, when it will prove invaluable when other sources are contaminated by accident or epidemic.—*Titus Munson Coan, in Harper's Weekly.*

DISEASES OF THE NERVOUS SYSTEM.

A Valuable Remedy for Headache.

We desire to call attention to a simple and at the same time wonderfully efficient treatment for many kinds of headache. We lay no claim to originality, nor do we know who the originator was, but having used it for a year or more, and in many cases with remarkable results, we feel disposed to give it our endorsement, and desire to make it more generally known. The remedy is nothing more nor less than a solution of the bisulphide of carbon. A wide-mouthed glass-stoppered bottle is half filled with cotton or fine sponge, and upon this two or three drachms of the solution are poured. When occasion for its use occurs the mouth of the bottle is to be applied to the temple or as near as possible to the seat of pain, so closely that none of the volatile vapor may escape, and retained there four or five minutes or longer. For a minute or so nothing is felt, then comes a sense of tingling, which in a few minutes—

three or four usually—becomes rather severe, but which subsides almost immediately if the bottle be removed, and any redness of the skin that may occur will also quickly subside. It may be re-applied if necessary, several times in the day, and it generally acts like magic, giving immediate relief.

We believe this was the basis of a once popular nostrum. The class of headaches to which it seems especially adapted is that which may be grouped under the broad term of "nervous." Thus neuralgic, periodic and hysterical headaches, and even many kinds of dyspeptic headaches are almost invariably relieved by it. True, the relief of a mere symptom is quite another thing from the removal of its cause, yet no one who has seen the distress and even *agony* caused by severe and frequently recurring headaches (and who has not seen it?) but will rejoice to be able to afford relief in so prompt and simple a manner, besides it is sure to secure the hearty gratitude of the patient if he has suffered long. As to the *modus operandi* we have nothing more definite than a theory to offer, and that is that the vapor being absorbed through the skin produces a sedative effect upon the superficial nerves of the part to which it is applied. We know by experiment that its influence is not due to its power as a counter-irritant. We, however, know that it does act, and if we do not clearly see in what way it acts, that is no more than can be said of several other remedies which are firmly established in professional favor and confidence.—*Physicians' and Surgeons' Investigator.*

A Formula for Nervous Headache.

Dr. A. L. HODGDON, of Farmwell, Va., recommends the following recipe for nervous headache: \mathcal{R} . Alcohol

dil., $\frac{3}{4}$ iv.; ol. cinnamom., m iv.; potass. bromid., 3 v.; ext. hyoscyam. fl. 3 iss. M. Fiat mist. Sig. One or two teaspoonfuls as required. Dr. Hodgdon has used this combination with universal success. It is not disagreeable to take and has no bad effects.—*Med. Bulletin.*

Tetanus.

Prof. BARTHOLOW says physostigma must be pushed to the border line of danger, in tetanus. Physostigmine (eserine) should be used hypodermatically.

Treatment of Epilepsy.

DR. E. B. SILVERS (*Medical World*): Causation should be the guide in selecting the proper remedy. Among these are worms, bad digestion, some uterine trouble, an injury of some kind causing this as a reflex action, and heredity. The bromides of potassium, ammonia and camphor mixed, in large doses three times a day, will almost always relieve, but to cure, the exciting cause must be reached. I have in 32 years of practice had plenty of cases, and have used the bromides singly and combined with fair success. I have found in females the exciting cause chiefly due to some uterine difficulty, either suppressed or over-excitabile menstruation, or some other congestion of the genital organs, or womb displacement; particularly in those women who have the seizures at their menstrual epochs. If the disease is the outgrowth of bad digestion in one of very nervous susceptibility, the following is a good remedy: \mathcal{R} Fl. ex. cannabis ind. (Squibb's) 3 ij., Tinc. tolu, 3 vi; 25 drops after eating and at bedtime increasing the dose until it causes a sense of intoxication. Or prescribe a pill containing: \mathcal{R} Ext. cannabis Ind. gr. 1-5; ergotine, gr. $\frac{1}{4}$; ext.

nucis vom., gr. $\frac{1}{4}$; aloin, gr. $\frac{1}{4}$; one three times a day. I have found the long-continued use of the bromides in large doses to largely blunt the mental faculties. In very young children it seems to prevent the development of mental power. In the use of the bromides be judicious; watch the effects on the mental energy. I have used nux alone and its alkaloid in all sorts of doses and fully tried them with no encouraging results.

In persons of plethoric habit, the use of ergotine is excellent, coupled with counter irritation.

Osmic Acid in Epilepsy.

The employment of osmic acid in epilepsy suggested itself to M. Wildermuth from the value of the drug in cases of neuralgia. At first the acid was used, but later an osmiat of potassium. The medicament was administered as pilules, each containing one milligramme of the active substance. The maximum daily dose employed was fifteen pilules, or fifteen milligrammes. Thirteen patients, the subjects of confirmed epilepsy, were under observation. The remedy was first combined with bromide of potassium, but this method was not followed by good results. Under the sole influence of the osmiat the number of attacks was steadily diminished, as compared with their frequency on expectant treatment. In only one instance, however, was complete immunity conferred.—*Med. & Surg. Reporter.*

DIGESTIVE TRACT.

Treatment of Cholera.

From the *Medical Record* we read that Horner's anti-cholera mixture, recommended by Hartshorn and Bartho-

low, may be used before or at the beginning of the stage of collapse: \mathcal{R} . chloroform; tinct. opii.; spts. camph.; spts. ammon. aromat., aa f. $\bar{3}$ jss.; creasote, gtt. iij.; olei cinnamomi, gtt. vii.; spts. vini gall, f $\bar{3}$ ij. M. Sig.—Gtt. x. to xx. in ice-water every five minutes.

A hypodermic injection of morphine is a most effective remedy for the diarrhœa and cramps.

Cholera specifics do not exist. Oxygen, saline venous injections, chloride of sodium drinks, warm baths, calomel, camphor, venesection, have all failed.—*Medical & Surgical Reporter*.

The Treatment of the Premonitory Diarrhœa of Cholera

Is the subject of a communication in the same journal by M. Lereboullet. He lays stress upon the importance of promptly treating any digestive derangement, and especially any diarrhœa, when cholera is prevailing, and advises the use of from twenty-five to thirty drops of paregoric after each stool, with or without ten or fifteen drops of the following mixture: Ethereal tincture of valerian, 10 grammes; Sydenham's laudanum; 95 per cent. alcohol, each 5 grammes; essence of peppermint, 15 drops.—*New York Medical Journal*.

A Saline Intra-venous Injection for the Treatment of Cholera.

H. HAYEM (*Revue Scientifique; Lyon Medical*) thinks that, besides the need of restoring the salts lost from the blood of cholera patients, it is desirable to overcome its acidity, and for that reason he advises the addition of soda to the saline injection employed, as in the following formula: Water, 1,000 grammes; chloride of sodium, 5 grammes; hydrate

of sodium, 1 gramme; sulphate of sodium, 25 grammes.—*New York Medical Journal*.

Copper and Cholera.

M. BURQ has renewed his advocacy of copper by writing a note which was presented to the French *Académie des Sciences* at a recent meeting by M. Bouley ("Gaz. hebdomadaire de médecine et de chirurgie.") The note contains the following propositions:

1. Persons imbued with copper by working with the metal daily have always been exempt from cholera, with very rare exceptions.

2. Numerous experiments in certain hospital services have demonstrated that the free use of copper is sovereign against the cramps and other nervous phenomena peculiar to cholera.

3. Dr. Lisle's cases (twenty-five cures in thirty-two cases), Dr. Pellarin's, Dr. Arnal's, Dr. Blondet's, Dr. Berger's, and those of others, as well as M. Burq's own experiments made at the Hotel-Dieu in 1866, in conjunction with M. Horteloup, showed that the salts of copper, administered freely by the mouth and by the rectum, and by the endermic method in the gravest cases, were the remedy *par excellence* for cholera. Of sixty-six known cases of confirmed cholera, eighteen of which were treated at the Hotel-Dieu, in which the absorption of the remedy was still possible, there were fifty-five recoveries.

[At a meeting of the Société de biologie (Ibid.), M. Bochefontaine submitted a letter from Dr. Muston, of Monthéliard, contradicting certain of M. Burq's assertions relative to cupric immunity from cholera, and stating that the workmen of Beaucourt, composing nearly the whole of the population, all work in copper, brass, iron and steel,

and that they were decimated by the epidemic of 1854, although they were the very workmen that M. Burq has declared were preserved from the disease.]—*Ibid.*

For Diarrhœa.

R. tinct. opii., $\bar{3}$ j; R. tinct. camphor, $\bar{3}$ iv; tinct. capsicum, $\bar{3}$ ij.; spts chloroform, $\bar{3}$ j; liq. ferri pernit, $\bar{3}$ ij; simple elixir ad., $\bar{3}$ iv. M.—Sig. teaspoonful when needed. The iron can be left out if so desired.—*Medical World.*

DISEASES OF RESPIRATORY ORGANS.

Inhalations of Nitrogen in Pulmonary Diseases.

Dr. SIEFFERMANN (*Gaz. méd. de Strasbourg; Bull. gén. de thérap.*) thus describes the effect of these inhalations:

1. With the first inspirations, the patient declares that he can breathe better, dyspnœa diminishes, and at the same time a feeling of well-being supervenes. The pulse becomes small, often thready, from contraction of the radial artery. So long as the process lasts, enfeebled, anæmic, and nervous patients have vertigo, with a sensation of feebleness and of pressure in the head, sometimes deepening into faintness. These symptoms are observed only at the first two or three sittings; the patients have then become accustomed to them and always bear them perfectly well. The symptoms vary in degree with the amount of nitrogen administered.

2. According to Mermagen, the suppression of night-sweats is a constant result, most commonly following the second or third sitting. Other experimenters are not agreed upon this point, some, like Kholschutter, maintaining that the sweats are increased. But Mer-

magen is very positive, and affirms that it is only in desperate cases of florid phthisis that the sweating is not controlled. He adds that, if Kholschutter's experience differed from this, it is because he used air containing ninety-six per cent. of nitrogen, a mixture almost poisonous.

3. One of the most surprising effects, according to Mermagen, is the very rapid disappearance of the dullness due to tubercular infiltration of the apex, which occasionally takes place after fifteen days of the treatment. Where an infiltration of the apex has been clearly made out, with dullness on percussion, bronchial respiration, and mucous râles, the vesicular murmur is heard again, with small moist râles and a tympanitic resonance. Kholschutter states also that he has seen dullness disappear when it corresponded to chronic infiltrations of the pulmonary parenchyma or to pleuritic exudates. But in several cases he observed the cough become more frequent, and the temperature rise nearly to 104° Fahr. He asserts, indeed, that the temperature rises regularly after each inhalation, which he considers a bad symptom. Mermagen believes that this rise of temperature coincides with the disappearance of the infiltration from the apex, and therefore that it is due to an absorption fever. The two observers' disagreement as to the explanation is probably to be imputed to the fact that one of them used air containing only from two to seven per cent. of nitrogen, while the other employed air impregnated with eleven per cent. of the gas at the least, and sometimes even gave pure nitrogen, so that he often produced poisoning like that due to carbonic acid. By dearly-bought experience, Krüll afterward proved that, to get good results, not more than seven nor less than two per cent. of nitrogen should be

added to the air; so that there is little room for doubt that the effects observed by Kholschutter are to be attributed to the use of excessive doses.

4. All observers agree as to the soporific effects. Mermagen says that he has seen more than one patient go to sleep while the inhalation was in progress, and that others were able to sleep for eight hours at a time, whereas before their night's rest had been prevented by cough and dyspnœa.

5. The appetite is perceptibly increased, and consequently the nutrition improved.

6. A good effect has even been observed upon colliquative diarrhœa, and in patients who were in a desperate stage of the disease.

Irritative cough was certainly ameliorated during the treatment, but the improvement did not continue. The compiler regrets that the breathing capacity was not tested with the spirometer and the pneumatometer, for a comparative table founded on such tests would have furnished the best data as to the results of the treatment.—*N. Y. Med. Journal*.

DISEASES OF CIRCULATORY ORGANS

Diagnosis of Valvular Disease.

FRAENTZEL lays down the following axioms in the *Charite Annalen*, ix.

1. Render no definite opinion on a case of valvular disease *sub finem vitæ* unless the diagnosis has been before definitely made out.

2. Valvular lesion of the right heart, and especially from endo-carditis, is of very rare occurrence in extra-uterine life.

3. In the diagnosis of valvular disease the consideration of the heart-murmurs should always be of secondary weight and importance.

DISEASES OF THE URINARY ORGANS.

Furunculosis and Sugar in the Urine.

It is a well-substantiated observation that in the course of diabetes mellitus extensive furunculosis may develop. And patients presenting themselves for treatment for this affection are often discovered to be diabetic and so the first knowledge of this state of affairs is obtained. On the other hand the possibility exists of a temporary diabetic condition secondary to furunculosis. From the gangrenous and sloughing tissues in wide-spread furunculosis there may take place absorption of sugar, the product of disintegration, and this sugar if not oxydized, will be eliminated as such by the kidneys. Then diabetes mellitus is diagnosed, but passes away with the healing of the furuncles. O. ROSENBACH relates a case in point in the *Deutsche Med. Wochenschrift*, 31. A child, a year old, had extensive furunculosis. There was no sugar in the urine at first and for quite a time. The disease was obstinate and did not yield to treatment. Soon sugar was found in the urine and continued to be present until the death of the child.—*Weekly Med. Review*.

Bromide of Potass. in Albuminuria.

(*Minor Medicale*). Acute cases of albuminuria, especially from cold, are promptly relieved by Bromide potass.

Albuminuria, the sequel of pregnancy, diphtheria or scarlatina also yields to its effect quickly.

Chronic albuminuria, especially when complicated with heart disease, requires its use for a protracted period.—*St. Louis Med. & Surg. Journal*.

CONSTITUTIONAL DISEASES.

The Management of Small-Pox.

Dr. J. E. SHADLE, M. D. (*Medical Summary*): Shenandoah is a thickly-settled mining town, covering but a small area of ground, with a population of about fourteen thousand people, variously composed of Irish, Welsh, Germans, Poles, Hungarians, Scotch, English, etc. Many of these, especially the Poles and Hungarians, are crowded together in small tenement houses where filth, ignorance and indolence form a blissful abode. The town is dependent on surface drainage, which, being defective, favors the development of the most poisonous effluvia.

These were the obstacles that had to be met on the 15th of April, when it was discovered that small-pox was in our midst, the disease having manifested itself simultaneously in four different parts of the town, in families in which filth had no end, but ruled supremely.

Inasmuch as the disease had existed in the four families above named for about ten days prior to its discovery, it was evident that neighbors and friends of the suffering had been exposed to the infection, and they, too, were liable to be stricken in due time with the same affection.

Taking these facts into consideration, and appreciating the necessity of the adoption of decisive measures to check its progress, the idea of erecting a small-pox hospital suggested itself to the Board of Health, which scheme was wisely considered and immediately put into effect. A site for the building was chosen at a distance of one and one-half mile from town on the top of a small mountain, where the air is pure and everything would prove advanta-

geous to the patients. A two-story structure was erected. On either floor there were twelve rooms, separated by a hall into two tiers, with six rooms in each tier.

The rooms were so constructed as to admit the most perfect ventilation. As there was a window at the ends of each hall, a general current of ventilation was secured, which greatly perfected the ventilation of the different apartments. At a short distance from this hospital building another house was put up for the accommodation of the physician, nurses and cook.

Before these buildings were completed it became necessary to quarantine the houses already infected—a system of management which is imperfect in every respect, for the simple reason that it is difficult to secure the services of watchmen on which reliance can be placed, as they will invariably allow ingress and egress by injudicious neighbors and friends.

Therefore, to obviate these difficulties and to hold the progress of the disease in check, not only the patients, but the whole family, as far as was deemed practicable, were removed to the hospital and put under treatment, those who were not down with the affection being isolated and vaccinated.

By the institution of this perfect system of management we succeeded in confining the disease to fourteen families, with only a total number of forty-five patients.

When it is taken into consideration that our town is one of filth and in such an imperfect sanitary condition, it must be admitted that the whole secret of the successful management of the disease lay in the isolation of the infected families brought about through the advantages of the hospital.

The lesson learned from this is of no

little importance, and it teaches us the following facts :

1. When small-pox breaks out in a locality, a board of health, with a health officer at its head, should be immediately organized, and the most rigid measures taken to subdue the ravages of the disease

2. By means of an hospital the disease can be more successfully controlled and isolation can be more perfectly accomplished, thus quieting the fears of the people and allowing the business industries of the place to move along undisturbed.

3. The afflicted families will receive an undivided attention, both from the physician in charge and the nurses employed. That feeling of abhorrence attending the principle of quarantining is expelled and the suffering patient has more freedom, and when he once becomes convalescent his wanderings around the hospital in the open air will effect a more speedy recovery.

Medical Treatment.—Respecting medical treatment very little is to be said; yet in my experience a few valuable ideas suggested themselves to my mind which proved very serviceable in the treatment of some aggravated cases.

In some forms of variola the intensity of the disease is so great in its initial stage that the life of the patient at every moment seems to be in jeopardy. There is intense fever, great restlessness, severe pain in the back, a tardy appearance of the eruption, or, in other words, the patient is in such agony that *death* would be a welcome visitor. When such a condition exists nothing rendered me better effects than the following : R quin. sulphat., grs. xx ; pulv. opii., grs. iij. M. ; ft. capsule No. j. Sig.—To be taken at once; this dose being intended for an adult.

As soon as the sufferer was thoroughly

influenced by the quinia and opiate, the great distress became magically relieved, the eruption speedily and fully developed itself, and the patient was placed on a favorable course.

During the stage of suppuration severe prostration becomes a concomitant symptom, accompanied with a high range of temperature and a rapid pulse.

Free stimulation is advisable under these circumstances, combined with other supporting measures, such as milk, egg-nog, concentrated beef-tea, etc. In addition to the above the following mixture was efficacious: R Quin. sulphat.; ammonii carb., aa, ʒ j.; mucil. acaciæ, ʒ ss.; aqua menth. pip., q. s. ad ʒ ij. M. Sig.—One teaspoonful every three or four hours.

Under its administration the patient would rally, the fever would subside and the pulse would decrease in frequency and become fuller and more regular.

When the period of desquamation sets in the patient is unusually irritable, sleepless nights are passed, dermatitis is present and pruritus is unbearable.

Nothing works so effectually and charmingly as a full and decided opiate at this time; the patient becomes tranquil and, by the time the effects of the anodyne and hypnotic have subsided, desquamation is fully established.

In some patients a certain idiosyncrasy exists when opium or any of its preparations is intolerable. Upon the discovery of this I usually could accomplish the desired purpose by the following: R. Pot. bromid., ʒ ij.; chloral hydratis, ʒ j.; morph. sulph., gr. j.; aqua cinnamoni, ʒ j. M. Sig.—One teaspoonful every hour, in water, until relief is experienced.

Not unfrequently small-pox patients complain a great deal of distress in the throat caused by the presence of pocks—

oftentimes producing a serious pharynx—or laryngitis.

Cough is present, and the voice becomes muffled or husky. To counteract the invasion of this complication I would invariably order with satisfactory results a saturated solution of *potassium chlorate* to be used as a frequent gargle.

Should bronchitis or pneumonia at any time threaten the patient, relief can often be secured by 10-grain doses of *muriate ammonia* in Brown mixture given every 3 hours.

Orchitis, which occasionally develops itself, can be relieved by frequent and free applications of *lead water* and laudanum or a strong solution of ammonia chloride.

It oftentimes happens in small-pox that corneal ulcers will appear, which prove to be not only distressingly painful to the patient, but also exceedingly annoying to the physician. The affection yields in some instances very obstinately to the treatment—the diseased action going on from bad to worse. In the above-detailed experience I had a number of cases to occur, and with a view to allay irritation and pain and put the eye at rest, so as to establish a healthy process in the ulcer, I began at first with the following prescription: \mathcal{R} Atropiæ sulph., grs. ij.; morphiæ sulph., grs. iij.; aquæ, $\bar{\text{z}}$ j. M. Sig.—Drop ten drops into the affected eye three times a day.

The remedy was pushed until the physiological effects of the atropiæ were fully obtained. Instead of improvement under its use taking place, the condition of the eye became so aggravated that loss of sight was threatened in some of the cases.

Seeing that failure certainly attended this mode of treatment, I sought for another remedy to help me out of the difficulty, and I found it to my great

satisfaction in the following: \mathcal{R} . Eserine sulph., grs. ij.; aquæ, $\bar{\text{z}}$ j. M. Sig.—Drop a few drops into the affected eye two times a day, and thus continue until the pupil is thoroughly contracted.

As soon as the effect of the eserine manifested itself in the contraction of the pupil, a sudden change for the better took place, the ulcer speedily disappeared and vision was thoroughly restored.

I cannot speak with too much praise for the invaluable use of this drug in the treatment of corneal ulcers.

In the local treatment many highly recommended measures were employed, but nothing tried served as well as the free application of olive oil. As soon as suppuration began the oil was ordered to be applied with a large camel's-hair throat pencil. The soothing that these applications effected was remarkable—the patients calling for it when necessity required it.

A few words as to diet and I am done. It is a self-evident fact that to carry a patient successfully through the disease his diet must be judiciously guarded and selected. Milk is the most appropriate and it should be administered at regular intervals by night as well as by day. A tumbler of milk to an adult every three hours will be easily digested and nicely support the one afflicted. This, of course, can be alternated with beef-tea or oat-meal gruel or something of the kind. But a rewarded reliance can be placed on milk, so that it is not necessary to make many changes.

I trust the few practical hints on the managements of small-pox which I have endeavored to present in this article will prove valuable to those who may in the future have a similar experience

Resorcin in the Treatment of Intermittent Fever.

Dr. JUSTUS ANDEER (*Med. Wochenschrift*): A large number of cases have been reported treated with resorcin where the cause was malaria, especially intermittent fever. Some authors report excellent results, while others, or possibly the same observers in another case, report absolute failure of the remedy. Knowing this diversity of opinion, the report of the following interesting case on the positive action of resorcin may be of interest: A school teacher, about 50 years of age, while giving me his history informed me that during the last ten or fifteen years he has been so unfortunate as to be compelled to teach and live in buildings that were situated near a cemetery. As a result of breathing the mephitic and impure atmosphere, especially before every change in the weather, he would lose all energy, become despondent and weak. Later, such symptoms as loss of appetite, chilliness, insomnia and an oppressive feeling in the left hypochondrium, became associated with those already mentioned, and not unfrequently he was confined to his bed. The disease in this instance was not recognized by the physicians until a certain regularity became manifest as to the time of the appearance of those symptoms, then the diagnosis of intermittent fever of the quotidian type was made. Quinine, which had been given frequently and in large doses, had little more effect than to still more disturb digestion. The oppressive feeling in the hypochondriac region indicated dilatation of the stomach and enlargement of the spleen. Patient often complained of vomiting, therefore the stomach was washed out twice with a solution of glauher salt. After this he felt somewhat improved, but not until the stomach was washed out with a five-per-cent.

and ten-per-cent. solution of resorcin did the quotidian type of the disease disappear for a few weeks. All treatment had purposely been suspended and in the course of two or three weeks the patient had a return of the fever, though not as persistent and severe as formerly. He now received during a whole week resorcin in powder and in solution in increasing doses from 1.0 to 5.0 grammes; after complete recovery, treatment was continued in small doses in wine for a few weeks. According to a dispatch sent me by the patient recently, he has been and continues to be in good health, although two years have passed since he was under my care. It is worthy of notice in this case that the patient had been treated in the best hospitals and summer resorts; climate, hygiene, and therapeutics, including the sovereign quinine, had no effect at all until resorcin was employed; then his intermittent fever and all the other symptoms disappeared entirely. — *Therap. Gazette*.

Treatment of Malaria.

Dr. E. A. WAGGENER (*Med. & Surg. Reporter*): In my student days I was taught that malaria disappeared with the coming of frost, but I practice in a country which it seems had not at that time been studied. We have malarial diseases the year round. A freezing temperature lasting for days and weeks does not stop it. We have *typical nothing* except malarial diseases; all others are complicated, malaria being a conspicuous element. Hence, cases of chronic malarial poisoning are quite numerous. 'Tis quite common to have patients apply for treatment in this condition: Skin dry and sallow, bowels constipated, tongue furred, taste bad, urine scant and high-colored, appetite capricious,

daily exaltations of temperature without rigors, night-sweats, great nervousness, and poor sleep, spleen enlarged to four or five times its normal size, more frequent in females, and especially so in those who have borne children; loss of strength and weight. In such cases after checking periodicity and arousing secretion with *mercurial* purgative, cinchonidia is used almost to the exclusion of quinine here. I place patient upon one of the following: R. Tinct. iodinii comp., f. $\frac{3}{4}$ j.; liqr. potass. arsen., f. $\frac{3}{4}$ ij $\frac{2}{3}$; ergot, ex. fld., f. $\frac{3}{4}$ v $\frac{1}{3}$; elix. simplicis, q. s. ft. f. $\frac{3}{4}$ iv. M. A teaspoonful ($\frac{3}{4}$ j.), for adult, after each meal. Or, R. Potass. iodidi, $\frac{3}{4}$ ij $\frac{2}{3}$; liqr. potass. arsen., f. $\frac{3}{4}$ ij $\frac{2}{3}$; vin. ferri amari, f. $\frac{3}{4}$ iv. M. A teaspoonful ($\frac{3}{4}$ i) after each meal.

The first I prefer, though sometimes alternate. Have known this to be taken four months consecutively. Have also used it in other glandular enlargements and fibroids, and noted its good effects beyond question.

I have had abundant opportunities of trying these combinations in cases of chronic malaria with enlarged spleen, and so can testify to their superiority over any of the many other combinations which I have tried. I don't think I have ever seen either of the formulæ in print; if so, the fact has escaped my mind.

Administration of Quinine by the Rectum.

Quinine is as often indicated in children as in adults, but on account of the difficulty of concealing its bitter taste, is seldom employed. Dr. R. PECK (*Deutsche Med. Wochschrift*), has made a number of experiments, and announces that quinine may be easily administered to children in form of suppositories. He found that not only the drug is rapidly and promptly absorbed in this way, but

that also far larger doses may be given than per os. He made use of from 16 to 24 grains of the muriate of quinine at a single dose, adding about 30 grains of butyrum cacao and a small quantity of unguentum cereum as mass for the suppository. He further recommends the washing out of the rectum about an hour before the introduction of the suppository, and mentions that the latter should be pushed up the rectum as high as possible, especially in very restless children, in whom he advises the introduction of the suppositories during sleep. Thus far few observations on this subject have been published, probably on account of the uncertainty of the doses and of the effect produced. Peck's method merits a more extended trial.—*Ibid.*

Black Tongue.

As far as I am aware, this disease has not been seen in England, though it has been described on several occasions by French writers. Cases are mentioned in the *British and Foreign Medico-Chirurgical Review* as being reported by Dr. EULENBERG and M. DE ST. GERMAIN. The former mentions one case, that of a boy, "whose tongue was black from base to apex." The papillæ were much hypertrophied, and the condition continued for three months. Scrapings of the tongue, when viewed under the microscope, showed "numerous thickened brown-colored epithelial cells, and on their borders pigment granules were inclosed by cell or membrane."

The cases reported by M. de St. Germain are four in number. He "four times met with a spot of an oval shape and intense black color in the middle of the organ." (1) A girl, aged thirteen, with increasing emaciation and paraplegia; (2) a girl, aged eleven, conva-

lescent from enteric fever; (3) an asthmatic old lady, aged seventy, whose health was not otherwise impaired; (4) an old man in fair health.

The case I have under my observation is one of a man, aged seventy; he is a painter by trade, but has not been in active employment for five years. He is one of seven brothers, and his family history is excellent. He has suffered with painter's colic, and had two strokes of paralysis eight years ago. He first noticed the discoloration of his tongue three years ago; commencing by an ellipse of black in the centre of his tongue, it gradually spread until the whole organ was black from base to apex. The tongue, on examination, is smooth and velvety to the touch, and the ellipse in the centre is of an intense black color. On microscopic examination, the scrapings of the tongue are seen to be made up of greatly hypertrophied epithelial fringes, evidently detached from the fungiform papillæ. These fringes, which look to the naked eye like hairs, are seen under the microscope to be formed of imbricated epithelial scales, stained of a deep-brown color, but no pigment granules can be detected. The patient is not an excessive smoker, nor has he been taking any substance, medicinal or otherwise, that would discolor his tongue. He enjoys fairly good health, suffering from slight chronic bronchitis and emphysema. At times the blackness has almost disappeared and has again returned. The age and temperament of the patient exclude the idea of it being a so-called hysterical or intentional fraud.—*British Med. Jour.*—*Louisville Med. News*.

Treatment of an Attack of Gout.

Prof. DUJARDIN-BEAUMETZ, says in the *Medical News*: To sum up, then:

When you are called to treat an attack of gout, you will first assure yourself of the integrity of the kidneys, then you will administer salicylate of soda in doses of from one to one and a half grammes, or, if you prefer, the tincture of colchicum seeds combined with quinine or strong tincture of aconite root. If, on the contrary, the kidneys are damaged, or if the heart seems to be degenerated, you will have to content yourselves with giving alkaline diluents and keeping the bowels open with saline purgatives, besides enswathing the affected member with wadding, around which is placed oiled silk.—*Med. and Surg. Reporter*.

The Use of Antipyrine Hypodermically,

It is claimed, causes neither general nor local inconvenience (*Centralblatt für der Gesamt. Therapie*). The best solution for this method of administration is said to be one gramme of antipyrine in fifty centigrammes of water, dissolved with the aid of heat.

Dilute Phosphoric Acid.

In an article published in the *Sanitarian*, Dr. T. D. CROTHERS says: October 1st, 1881, I began a series of comparative studies of the effects of the acid phosphate (of Horsford) and the acid phosphoric of the U. S. P., which has been continued up to April 1st, 1882, a period of six months. These studies were made on nineteen selected cases of inebriates and opium cases; patients who resembled each other very closely in natural vigor, degree of degeneration and disease. The plan pursued was to begin the use of the acid (Horsford's) about two weeks after admission, when all the active symptoms had subsided, and continue its use for six weeks; then

after an interval of one week try the U. S. P. acid for an equal length of time ; in meantime noting the pulse, weight and general condition of the patient every day ; reversing the order in other cases, that is, U. S. P. acid first, then Horsford's acid last. The difference in every case, after excluding all possible complications, was very prominent ; consisting of increased nerve force, improved heart action, lessened nutrient perversions, and a somewhat remarkable change in the *delusions* and *insomnia* present in *many cases*. My studies are not yet complete, because they do not cover a large enough field, or cases that are treated long enough. But I can say at this time that I think the following facts are already indicated from this limited study :

1. Horsford's acid phosphate is a remedy of great value in inebriety and opium-taking, particularly in building up functional energy and brain force.

2. It exceeds the U. S. P. acid in every case where this may be indicated.

3. As a nutritive medicine, so far it seems unequaled in its power of restoring the building-up forces of the body.

The Treatment of Diphtheria.

Before the late International Medical Congress Dr. BERLEME NIX (Denmark) read a paper on the treatment of diphtheria. He maintained that diphtheria was a disease produced by a specific contagion. The disease was in the very beginning located in the throat. The organism caught the contagion from the false membrane. Against the false membrane the chief treatment is to be directed, paying all regard to the patient's state of health in general. It was of the greatest importance to begin the treatment as early as possible.

Caustics were useless, astringent and solvent drugs ineffective. Medicine was of no use, except, in some cases, tonics and stimulants. The treatment should be instrumental, and should combine isolation, strong food and stimulants, and fresh air ; cleansing of the throat by gargles ; syringing with disinfectants ; removing of the false membrane by means of the sharp spoon, followed by cauterization of the scraped surface with solid nitrate of silver.—*Med. and Surg. Rep.*

Emphysema of the Skin in Diphtheria.

Recommending in diphtheria, when a dangerous emphysema of the skin threatens life, to make a small incision with a bistoury into the tense skin, Dr. REITZ, in a letter to the *Deutsche Med. Zeit.*, 56, 1884, says that during his residence in Central America, one day his mule, while jumping over a fence, received a considerable wound in the skin of the forelegs by a splinter. His servant made the animal trot back to the city, and the consequence of the rapid motion (?) was the development of an emphysema of the skin, causing considerable swelling of the chest, forelegs, neck and head of the animal. Its exceeding restlessness proved the painful condition and great apnœa of the mule. There was no veterinary surgeon in the place, and so R. determined to take up a fold of the skin and cut it through with the bistoury. He remarks, that cut and jumping aside were both simultaneously performed, the mule anyhow not being in an amicable condition of mind. The swelling disappeared and the four-footed patient was saved. R. recommends, therefore, strongly the same operation in the case of an emphysema of the skin developing in consequence of the destruction of the mucous membrane in

the pharynx or larynx by diphtheria, as breathing and swallowing continually force more air into the areolar tissue. Such a patient not only suffers a great deal, but also risks death by suffocation. —*Ibid.*

DISEASES OF THE NERVOUS SYSTEM.

The Rheumatic Origin and Treatment of Chorea.

It has been maintained by some observers that rheumatism is a prolific cause of chorea, and by others this view is denied. Dr. OCTAVIUS STURGES, who has made careful observations on the subject upon the cases of 219 children, tells us, in the *Lancet*, that the etiology of chorea must find some broader basis than any that rheumatism affords. He considers that rheumatism may be regarded as one amongst many agencies predisposing to chorea. As to treatment, he seems to place very little reliance upon drugs, for he tells us that the treatment adopted was rest, bodily and mental, good food, country air, patience and encouragement.

Epilepsy.

Clinical Lecture by Dr. WM. PEPPER, published in *Med. Times*:

Gentlemen—This little girl has been before you on one or two occasions. Let me recall to your minds the more important features in her history. She is ten years of age, born of healthy parents, with no inherited morbid tendency, and lives in a healthy neighborhood. Up to the age of five years she was apparently healthy, but at this time it was noticed that she was "nervous" when her attention was strongly fixed. There is no history of severe sickness or other cause to account for this.

Shortly after this it was noticed that the child began to have falling-spells, and these would sometimes recur as often as two or three times a day, and at no time did she go a week without an attack. In these seizures she would fall to the floor if there was no one at hand to support her, and she evidently lost consciousness for the moment, for she would assert that some one had thrown her down. There was no general convulsion, but for a few minutes there would be trembling of the hands. She did not froth at the mouth or roll the eyes, but after the attack had passed she became very red in the face.

She was brought to the hospital four months ago. At that time she was having the spells very frequently, and the mother could not trust her out of her sight. Her memory was also much impaired.

The story of this case is one of apparently essential epilepsy. No peripheral cause can be found for these attacks. The child has no heart-disease; there is no history of an injury or of a sudden shock of any kind, but gradually, without apparent cause, she at the age of five years began to have these attacks, which continued to increase in frequency until four months ago.

At that time, learning that the girl had been under the care of the family physician for some time, I concluded that the bromides had been thoroughly tried. The child was exceedingly feeble; she would drop down on the slightest exertion, and many of the falls were undoubtedly the result of muscular prostration and debility. There was also to a remarkable extent a want of mental activity. The child was listless, and her memory was rapidly failing. Concluding then that the bromides had been used, I considered it useless to push them. I thought it better to direct

attention to hygiene, diet, the administration of tonic remedies, and trust to the development of the system, rather than attempt by specific remedies to coerce the manifestations of the disease.

I ordered a properly-regulated diet and the use of a simple solution of the phosphates of soda, lime and iron in an excess of dilute phosphoric acid. The child had no other treatment.

The mother reports that there has been decided improvement. The attacks do not recur so often, a week frequently intervening between the attacks. The disease is, however, far from being checked, but we are encouraged to persist in the plan of treatment adopted. In the meantime the child will be kept from school, the mother teaching her at home.

Hypersomic Acid in Neuralgia.

In Tubingen, as well as in Kiel, experiments have recently been made to determine the action of hyperosmic acid (*Deutsch Med. Zeit.*, July 7, 1884). This drug was first recommended in malignant tumors, into whose parenchyma the acid was injected. In both localities the result has been nihil, the inflammation ensuing exerting no influence on the malignant character of the new growth. As well known, Dr. Winwarter was the first to bring the remedy to the notice of the profession.

Dr. Neuber, in Kiel, accidentally employed the hyperosmic acid in several cases of peripheral neuralgia, which had not yielded to other drugs. He reports three cases where a daily subcutaneous injection of the acid was employed. He made use of a one per cent. watery solution, of which from four to six drops sufficed for each injection. Selecting the locality most affected by the pain

for the hyperdermic application of hyperosmic acid, he found that in each of the three cases of neuralgia, though they were of stubborn character and had thus far withstood every possible treatment, the effect of the acid was magical, the pain after a few applications ceasing, and in no instance returning. The injections themselves were neither very painful nor followed by suppuration, nor accompanied by poisonous side effects.

There are many cases of superficial neuralgia which apparently are incurable until some new remedy is tried, to which they at once yield. The more physicians report such cases, the sooner will the conditions be determined under which each anti-neuralgic remedy may be expected to act promptly.—*Med. and Surg. Reporter.*

A Sign of Sciatica Which is Little Known

Is noted by M. DE BEURMANN. The manner of finding it is by causing the patient to lie on his back in a passive condition, then the leg is slowly elevated and flexed upon the pelvis. Immediately the patient complains of an intense pain along the track of the nerve, and particularly at the nates, corresponding to the sciatic notch. The cause is the varied degree of tension exercised upon the nerve in these different positions. This symptom is a constant one and also pathognomonic. From the mechanism of this sign the author deduces the manner of treating it. That condition which permits the nerve to remain in the most relaxed position is the most favorable, and to do this it is only necessary to place the leg so that it will be flexed upon the thigh and immobilize it in that position.—*Weekly Med. Rev.*

DISEASES OF THE URINARY ORGANS.

The Treatment of Bright's Disease.

Dr. JAMES TYSON is one of our highest authorities on all diseases of the urinary organs; hence it is important that we should be acquainted with his treatment of Bright's disease. In the course of a lecture published in the *Boston M. and S. Jour.*, he thus gives it to us :

"Next, as to *treatment*. Many cases of acute Bright's disease, if recognized early, require no treatment but rest in bed and an easily assimilable diet, of which the best form is milk. Although this is true, it does not do to leave these patients unwatched, for the course of the disease is uncertain : and, as a rule, you will not rest satisfied with this treatment, although what more is done will depend to a great degree upon the urgency of the symptoms. We wish to keep the kidneys acting in order to prevent the retention of urea in the blood and the consequent danger to life which arises from this accumulation. After instituting the general treatment which I have suggested, I see that the bowels are opened, for neither digitalis nor any other diuretic will act as long as the bowels are constipated. If there is costiveness, some saline laxative, as magnesia or the citrate of magnesia, or some of the natural aperient waters, should be given. After the bowels have been opened, digitalis may be given either in the form of the tincture or infusion, giving fifteen drops of the former, or a dessert-spoonful of the latter, every three or four hours. If this does not produce the desired effect, I should not increase the dose of digitalis, for it is liable to derange the stomach, but I should associate with it one of the

vegetable alkalies, as the acetate or the citrate of potassium.

"When admitted, this man was given one-tenth of a grain of elaterium to act upon the bowels, and afterwards received fifteen grains of acetate of potassium and a teaspoonful of the infusion of digitalis every three hours, making four or five doses in the course of the day. Under this treatment he did very well, and the œdema rapidly disappeared.

"If the treatment which I have suggested does not produce satisfactory results, and the symptoms grow worse, I sometimes use cups over the loins, relieving the renal arteries through the lumbar arteries, by the anastomosis which exists between them. After the cupping, I usually apply a corn-meal or flaxseed-meal poultice, the surface of which has been sprinkled with mustard. This keeps up a permanent counter-irritation, and it often starts the secretion of urine.

"If these measures fail, free action by the skin should be promoted. This is best accomplished by jaborandi, and in this case it became necessary to administer this remedy. As I have said, the patient at first did well on the use of digitalis and the acetate of potassium, but day before yesterday the resident physician found him delirious and acting in a very singular manner. On investigation it was found that although the urine was not actually suppressed he was passing a very small amount. We at once concluded that his symptoms were uræmic, and due to the retention of urea and its allies. The complication is frequently met with : a patient will be doing well, when suddenly there will appear coma, convulsions, or delirium, as we had in this patient. In addition to delirium, the man had slight convulsive seizures. We at once pro-

ceeded to treat him as we usually treat such cases in the hospital. An infusion of two drachms of jaborandi leaves in four ounces of water was made, and the whole quantity given by enema. We often make the infusion with only one drachm of jaborandi, but as the symptoms were urgent, a double quantity was used. This did not produce perspiration, and in an hour the injection was repeated. In a short time he sweat profusely. He was also given one drop of croton oil, which acted promptly. The next morning all the symptoms had disappeared and the man was entirely rational. We are not always so successful in removing the uræmic symptoms, but frequently the result is all that could be desired. In this case the dropsy was also greatly relieved by the sweating.

"The above well illustrates the usual course which is to be pursued in cases of acute Bright's disease. If the disease is promptly recognized and properly treated from the beginning, the patient generally gets well; but if overlooked, as it often is, the opportune moment may be lost never to be regained. Perhaps no disease demands for its prompt recognition and treatment a broader and more thorough medical education.

"There are modifications of the treatment I have described which are demanded by circumstances. In private practice, instead of giving jaborandi, I should use the alkaloid, pilocarpin, giving the nitrate or muriate subcutaneously. The dose is from one-fourth to one-half a grain, as the urgency of the symptoms may demand. My usual custom is to give one-fourth or one-third of a grain, and if sweating does not come on within half an hour, I repeat the dose. Jaborandi not only produces sweating, but it also increases the secretion of saliva, and may induce purging. It is also a diuretic. We have

in this remedy a most valuable addition to the therapeutics of Bright's disease. In order to keep up the diaphoretic action, pilocarpin may be continued in doses of one-tenth of a grain. This is readily done by the use of gelatin-coated pills. One pill may be given in the evening, or one may be given night and morning. The system rapidly becomes habituated to the use of jaborandi, and the dose has to be increased. Another good way of administering this drug is to use the inspissated juice by suppository. The fluid extract may of course be used by the mouth, but it is a less agreeable remedy.

"If jaborandi cannot be procured, there are other ways of inducing sweating which we have now almost entirely given up, although they are very efficient. Hot-air or steam-baths may be used for this purpose. In employing the hot air bath the patient is covered with a rubber blanket, and a tube with an expanded extremity which is held over a spirit lamp is passed beneath the covering. In the steam-bath, the steam from an ordinary tea-kettle may be conducted through a piece of rubber tubing under the bed-clothing. These methods are not as promptly effectual as the administration of jaborandi, but at the same time there are circumstances when they may be required.

"There is another method of treating urgent uræmic symptoms which should be mentioned: that is, bleeding. I should not hesitate to bleed a patient suffering with uræmia if he is not relieved by the measures described. As you are aware, the uræmic symptoms are dependent upon the retention of urea and allied substances in the blood, which, when they have accumulated to a sufficient quantity, act upon the nervous system, producing delirium and convulsions, or coma. The condition

is, in fact, an intoxication. If, under such circumstances, the patient is bled and a pint or a quart of this blood removed, some of the poisonous material is taken away, and the patient is relieved. In puerperal cases I believe that bleeding relieves not only by diminishing the vascular and nervous tension, but by removing the accumulated uræmic poison which has produced the symptoms.

"Another valuable remedy for the control of uræmic convulsions, which should not be forgotten, is chloral. So far as the relief of the convulsions goes, jaborandi is a slowly-acting remedy, because it operates by removing the poison from the blood. Something is needed to act upon the nerve-centres and obtund them, and make them less susceptible to the poisonous substance. Chloral often admirably answers this purpose. It may be given by the mouth or rectum. By enema the dose is one drachm. I have seen the convulsions stop almost instantly after such an injection.

"There is still another remedy which has been strongly urged by some, which should be used with caution, and that is morphia. It is some years now since Dr. Loomis, of New York City, advocated the hyperdermic administration of one-half a grain of morphia for the relief of the convulsions in acute Bright's disease. There is no doubt that in certain chronic forms of the disease, more particularly in the contracted kidney, the effect of opium is to increase the danger of uræmia; and Dr. Loomis states explicitly that this treatment is only applicable to the acute disease. I confess to being less particular in the use of opium in chronic Bright's disease than I used to be, always excepting contracted kidney; and where other remedies fail I would use a hypodermic injection of morphia in the uræmic con-

vulsions of Bright's disease, but I should arrange the order of remedies rather as follows: jaborandi, chloral, bleeding, morphia.

"With such measures, these cases can often be brought to a satisfactory termination; and although the appearance of uræmia is a serious sign, yet it does not necessarily follow that the patient will die, and recovery therefrom in acute cases is not uncommon. Uræmic convulsions in chronic Bright's disease is a far more serious condition."

DISEASES OF RESPIRATORY ORGANS.

The Medical Treatment of Pulmonary Cavities.

Professor M. TRASTOUR, of Nantes concludes an interesting clinical paper upon the medical treatment of vomica in the lungs, with the following practical deductions. Given a case, tuberculous or not, which has had and still has pus in the lung, the pleura, or mediastinum, which pus is evacuated through a vomica, and sometimes through thoracic fistulæ,—a case in which there is no urgency, necessity, nor opportunity for thoracentesis, aspiration, or resection of the ribs,—what is the medical treatment to prescribe? This query he answers as follows: *First indication.* The suppuration can only cease if the walls of the pus-cavity retract sufficiently for cicatrization; for this it is required, on one hand, that the lung shall dilate, on the other, that the thoracic wall shall yield and become deformed. In some cases this deformity is very marked; and such depressions at one point or over one side of the chest are sometimes both striking and instructive, as noticed and figured by Laennec. The leaning to the affected side, the dropping of the

shoulder, the diminution of the anterior and posterior muscular layers of the thorax in the young, a tendency to lateral deviation of the spine, and prominence of the scapulæ and sometimes the compensating fulness of the opposite side of the chest, were all noted by him also.

Chronic pleurisy, thoracic abscess, and tubercular cavities may all produce deformities of the chest in subjects that are still young. The chest, said Laennec, must retire to make up all of that which the enfeebled lung is unable to furnish by dilating. The first indication of medical treatment of vomicæ is therefore, to favor the sinking of the chest-wall until cicatrization can occur, while diminishing as much as possible the inevitable deformity. To accomplish this what will be necessary?

1. Empty carefully the cavity as completely and as frequently as possibly can be done. For this inversion has been practiced with good results. Prescribe and obtain the frequent practising of deep inspirations, made methodically, in order that the lung may be made to expand.

2. The disposition to the formation of pus must be combated; for which iodine preparations are recommended.

The 3d indication is to prevent emaciation by giving a liberal, easily-assimilated diet.

4. Auto-infection must be guarded against by antiseptics and disinfectants. A glycerin spray, with or without carbolic acid, is very grateful to the patients.

5. Revulsives are useful over the affected area of the lungs.

In the 6th place, and finally, he insists on the value of living in the country and of breathing pure air. He recommends to those suffering with empyæma that they should breathe the air

of the fields, or even, as an experiment, to try that of the sea-shore when a favorable opportunity presents.—*Bull. Gen. de Therapeutique.—Med. Times.*

DIGESTIVE TRACT.

Pilocarpine in the Treatment of Ascites Caused by Disease of the Liver.

Ascites, caused by cirrhosis of the liver, has not been very amenable to treatment up to this time. Most clinicians have, therefore, come to the conclusion that paracentesis was the only resort. Drastics and diuretics had to be abandoned as inefficient, and in fact there seemed to be little hope left for this class of sufferers. Harley and Roberts claim that repeated paracentesis promises good results, while on the other hand there are those who have never accomplished anything by puncture. Mackenzie reports two cases as cured by means of flannel bandages tightly wrapped around the abdomen. Siegnit combines with the bandaging, faradization of the abdominal muscles. From all the different reported cures one can readily understand that the therapy of ascites, caused by disease of the liver, has been quite unsatisfactory, and most of the cases have been treated on the expectant plan.

During the year of 1880 the author treated a case of this kind by all the remedies that have been recommended in the books, without any results. Finally paracentesis was resorted to, but with each operation matters got worse, and the quantity of liquid steadily increased. It occurred to him to administer pilocarpine immediately after an operation, to prevent or give other course to the serous exudation that each time was emptied into the peritoneal

cavity. The patient received twice daily 0.015 (gr. $\frac{3}{8}$), of pilocarpine for six consecutive days with the effect of causing profuse diaphoresis and discharge from the salivary glands. Stimulants (whiskey, 60 grammes [$\frac{3}{2}$ ij]) were given the patient to counteract the weakening action of this medication. From the administration of the first dose the ascites diminished, and the patient was finally discharged from the hospital as cured. Three months later the patient was examined but did not discover a symptom indicating disease of the liver or ascites.

Another case the author treated in conjunction with Dr. Haas. The diagnosis was an enormous ascites caused by cirrhosis of the liver. The swelling was so great that it caused dyspnœa, for the relief of which paracentesis was made a few times and 20 to 30 liters (5 to 8 gals.) fluid removed. The effect was not lasting. Finally respirations ran 38 and the pulse 118 per minute; the urinary secretion was entirely suppressed. After a consultation it was concluded to employ large doses of pilocarpine, since the case seemed hopeless. The patient received twice daily 0.01 gramme (gr. $\frac{1}{6}$) of pilocarpine in a large dose of whiskey, besides some solid food. This drug did not seem to act so favorably in this case, diaphoresis being very scanty. Two weeks later, after another puncture, the dose of pilocarpine was increased to 0.02 (gr. $\frac{1}{3}$) and followed by a large quantity of whiskey, with the result of causing profuse sweating. Pulv. jalap, with tart. depuratus, was given in conjunction for the obstipation. The patient gradually recovered, when he was discharged, and he was as healthy as before.

If the good results obtained in these two cases do not indicate much, they may cause other observers to try the

pilocarpine treatment. Paracentesis often does not only do no good but seems to do harm. Both of these patients were very much weakened, and it seems almost incredible that they could tolerate 0.02 grammes (gr. $\frac{1}{3}$) of pilocarpine twice a day, but possibly the large doses of stimulants given shortly after, did much to obviate the depressing effects of the pilocarpine drug.—*Mittheilungen des Vereins der Aerzte*.—*Ther. Gazette*.

Tape Worm.

The following formula for the expulsion of the tape worm is highly recommended by Dr. Brooks (*Med. and Surg. Rep.*): Chloroform, ex. male fern $\text{āā f } \frac{3}{2}$ j; emul. ol. ricini (50 per cent.) $\text{f } \frac{3}{2}$ iij. M. Sig. All to be taken at once after 24 hours' fast.

The Etiology, Pathology and Treatment of Cholera.

Dr. J. H. ETHERIDGE (*Medical and Surgical Reporter*):

If it were true that these little microbes caused the disease, and acids would kill them, then the first thing to do is to get acid into your patient, and kill the germs. Give them some form of the mineral acids as the dilute sulphuric, sulphurous, or hydrobromic acid; but we must not depend wholly on these to arrest the progress of the disease, we must immediately put the patient at rest. The mucous membrane in its entirety is an absorbing surface; in its first and middle portions, its action is changed or converted into a most rapid exudation. The surface of the stomach is exosmose in its action; there is relaxation of the cutaneous surface that needs to be attended to; the blood undergoes a rapid change as a result of the disease; the saline elements and watery portion

of the blood are washed away; the blood becomes thickened, so much so, oftentimes, that it will not circulate; molecular change and heat cease. The vaso-motor nerves may be the first to take on this primary change in the disease. We must adopt measures to stop the inverted action of the mucous membrane. How are we to do this best? The speaker had tried every rational method of treatment that he could devise in former years, although he never had tried horse-radish or vaccination or gunpowder, as had been mentioned in the paper. He had cupped the spine, applied sinapisms over the epigastrium and spine, applied dry warmth and frictions, had seen patients placed in the ice-pack, and rolled in blankets wrung out of ice-cold water; he had applied salt and ice about the spine, he had used emetics of salt and mustard, had bled them by opening a vein when the blood would run, and this he had seen afford temporary relief. In a few instances emetics of salt and mustard he had seen help a patient. *The most successful method*, however, is to diminish the excitability of the mucous membrane, lessen the tendency to wasting of the saline elements, and promote the action of the kidneys. And first of all, the cholera patient should be placed entirely at rest in a horizontal position; then apply dry warmth to his limbs; do not apply friction, and if cramps appear, gently seize the muscles with the hands and compress them. Apply a large sinapism of mustard to the epigastrium, and when it becomes too hot, change it to a point opposite (on his back), or between the shoulders.

During the years 1866 and 1873 he gave internally the following powder: Calomel, gr. j., morph. sulph., gr. $\frac{1}{2}$, sacchar. alba, gr. v. After each attack of vomiting, do not wait to give it at stated

intervals, for to do so it might be given the very moment he vomits again. Mix the powder with a spoonful of ice-water, then give a small piece of ice to satisfy the patient. Serve the rectum in the same way with an anodyne and alterative remedy by giving a powder composed of plumbi acetats., gr. x, morphæ sulph., gr. ss, in two ounces of cold water. This is to be used as an enema, and should be retained by assisting the patient to do so. The latter part of this treatment he has pursued since 1849. In addition to the internal remedies, he gives: \mathcal{R} . Carbolic acid, gr. $\frac{1}{4}$ $\frac{1}{2}$; tr. opii camph., 3 ss- $\frac{1}{2}$; tr. gelsemini gtt. v., in a little glycerine and water alternately with the powder.

These are very beneficial remedies to overcome the vomiting and assist the urinary secretion. Give other remedies also to favor secretion of urine, such as the diluent drinks. We should build them up and prevent collapse. Should this ensue, we must replenish their forces by giving any of the broths, such as beef tea or chicken soup, or rice boiled with meat, well seasoned with common salt to make up for the waste of the saline portion of the blood that has been washed away. Give also strong coffee in teaspoonful amounts at first every few minutes, and gradually increase this amount to act on the vaso-motor system; repeat it as often as every fifteen minutes, increasing the quantity steadily as it could be retained. His skin should also receive especial attention in addition to the above remedies, that are to be applied externally. Give a hypodermic injection of atropine to act on the periphery, combined perhaps with minute doses of strychnia, which may be introduced anywhere over the surface. Do not use ergotin, for this is depressing. One writer recently claims to introduce an equal mixture of

whisky and water in the areolar tissues of the thigh until reaction comes on, will arrest further progress of the disease. I would suggest instead of this, that it consist of a saline water injection instead, to be used in the same manner. Such, though, is the outline in substance of the treatment to replenish most cases, and if persistently and carefully carried out, will in twenty-four hours bring about a fair chance in most cases for the patient to be on a good footing.

For Constipation.

R. Olei ricini, olei amygdale dulcis, āā ʒ ss. to ʒ ij. Sig. Inject into the subcutaneous cellular tissue of the back or limbs.—*Med. Bulletin.*

Painful Gastric Affections.

R. Bismuth subnit. gr. lx.; ext. canab. ind., gr. vj. M. Divide in pil. xiiij. bis in die.—*Ibid.*

Stomachic and Tonic.

R. Pulv. rhei, ʒ iss.; syrupi, ʒ j.; spt. chlorof., ʒ iiij.; ess anisi. ℥ xx.; aquæ carui, ʒ viiss. Fiat mixtura. Sig. A small tablespoonful at a time as a tonic or stomachic, or a wineglassful as a purgative.—*Ibid.*

Obstinate Vomiting.

Tincture of iodine, administered in doses of five drops in a teaspoonful of water, and repeated every fifteen minutes, will put a stop to most cases of obstinate vomiting. It acts as a stomachic sedative, is effectual in gastric catarrh, gastro enteritis, etc., and is especially valuable in vomiting from alcoholism.—*Med. Brief.*

Pills for Habitual Constipation.

The *N. Y. Med. Journal* gives the following formula: ext socotrine^a aloes, 1.80 gramme; pure ox-gall, 1.20 gramme; resin of podophyllum, 0.15 gramme. To be divided into ten pills. One pill to be given every evening. As an occasional remedy, a pill may be given morning and evening.

Lotions for Mercurial Stomatitis.

The following formula is given in the *Union Medicale*: tincture of iodine, 4 grammes; cinnamon water, 50 grammes; syrup of cinnamon, 20 grammes; distilled water, 250 grammes. To be used as a mouth-wash. If the breath is fetid, the following mixture may be substituted: chlorine-water, 10 grammes; decoction of althæa, 300 grammes; honey of roses, 40 grammes.—*Ibid.*

Clitrophobia.

By this term is understood a disturbance of the cerebral functions, somewhat similar to agoraphobia. The subjects of this affection have a horror of being in an enclosed place. When shut up in a room they experience a sensation of heat in the head, the arteries of the temples beat forcibly, they become furious and make frantic attempts to open the door or to leap from the window. Clitrophobia may exist as a pure monomania unaccompanied by any other delirious manifestations, or it may occur in connection with other psychological disturbances. It is a rare condition, and the prognosis should, in every case, be a reserved one.—*Revue Medicale*, No. 35, 1884.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.



SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fractures of Patella.

Dr. D. I. S. ESHLEMAN (*Planet*): Fractures involving the joints in their permanent repair unite, as other fractures do, only deprived of temporary callus on one or more surfaces, and washed with synovial fluid, require more perfect adjustment and longer time to make perfect union. Provisional callus in these fractures cannot be depended upon. An attempt to use the limb as early as in other fractures is sure to separate the portions of bone softly united and allow the synovial fluid to enter so as to prevent bony union. Permanent union of bone by bone substance secreted by the fractured surfaces of the bone involved, when held in perfect apposition, is not so slowly accomplished as is generally supposed. Too much attention is directed to union by provisional callus. The less provisional callus the better. The better the apposition of the parts and more perfectly maintained in position, the less will be the deposit of periosteal callus. Satisfactory union of a transverse fracture of the extremelower third of the tibia made very good union, such as dismissed all longer support in two weeks time, with the deposit of more than an appreciable line of callus. The lad joined his play-fellows in the street, without restraint. This case the writer exhibited at a meeting of the Phila. Co. Med. Soc. The line

of callus was sufficient to verify the fracture. As the fracture was difficult of diagnosis and the subject of dispute when it occurred, the patient was anæsthetized and the fragments separated in the presence of three surgeons, before all were satisfied.

In this case the perfectly transverse line of the fracture held by the fibula and by surgical splints maintained apposition so that bone union was by first intention. The almost invisible line of separation was speedily obliterated by bone tissue secreted from bone fluids contiguous, and not from the periosteum, as such could hardly penetrate the parts or be required.

This is what we want in fracture of the patella. Much has been said about appliances to maintain apposition in fracture—too much, indeed. The fracture is seldom accompanied by severe injury to muscles that would set them to jerking, as in the case of other fractures.

The limb should be firmly bandaged from the toes to the knee; then from the pelvis also to the knee. Binder's boards, double thickness, or felt made wet and soft, are next bound to the under side of the limb, two-thirds its length and half its width. These are bound by roller-bandages to the limb, as before. The patella yet remaining uncovered will be found easily brought in apposition by the fingers. The surgeon is now prepared to bind together the fragments of bone. He wants a piece of light wood about four inches

long, half an inch thick, and about an inch wide, to be tacked to the felt splint horizontally, in the popliteal space, when the splint becomes dry. But this block may be held, at first bandaging, by the roller. The ends of this sloat will serve to prevent the folds of the bandage sliding into the popliteal space, applied figure of eight style to the upper part of the knee-cap and lower end of the sloat, and to the lower fragment of the patella and the upper end of the sloat. While a narrow soft bandage is being thus applied the fragments must of course be carefully adjusted and not allowed to tilt in any direction.

The patient must be instructed as to the nature of this fracture and the certainty of bony union, provided he will not use the limb for several months. He will very soon learn to go about the house by aid of a strap attached to the toe of his shoe, which, held in his hand, will serve to move the limb forward as he walks the room, putting his weight on the lame leg while it is held stiff by the splint.

The last case so treated was a lady weighing over 200 pounds; obtained perfect bony union of a patella, fractured across its centre, as provided by several years' use of the limb without ligamentous stretching as deceptive cases develop in time. If true union in fractures generally requires six months to become complete, then bones involving joints where provisional callus cannot be depended upon as a splint must have the same time. The above case was well united after three months, after which time the limb was used with care. Possibly cases of bony union have by too early use become ligamentous. The writer can refer to such a case in the hands of an eminent surgeon.

Plaster of Paris Splints in the Immediate Treatment of Fractures of the Leg.

Dr. JOHN CROFT, in the *Med. Med. Jour.*, thus concludes an able article on this subject :

I still hold that for the immediate treatment of fractures the splints are superior to the plaster-of-Paris bandages; and for the reasons stated in my original paper, that the bandages form a thick case which it is comparatively difficult to remove. It is most desirable, in the cases under consideration, to put on an apparatus which, in case of accident, such as rapid, unusual swelling, pain, or misadventure in application or manipulation, can be easily taken off with the least possible disturbance of the broken limb. To remove the complete case made by plaster-of-Paris bandages, it must be cut open, and then the limb extracted from it; another case must be built up. These steps cause the injured limb much disturbance and some pain. When the splints have to be removed for some accidental cause, the process is a very easy one. The muslin bandage is easily cut up by scissors; the splints can be removed or turned aside, one at a time, so that the limb is not left without support. In the majority of the few instances in which this change has to be made, the same splints may be reapplied with fresh muslin bandages.

The apparatus consists of : firstly, inside and outside splints made of common house-flannel and plaster-of-Paris; and, secondly, of muslin bandages. The splints for fractures below the knee are shaped somewhat like the old short outside splint; the footpiece is, however, wider. The splint for the inside of the leg is similar in length and width to that for the outside. The splints should be long enough to extend from

above the knee to the middle of the metatarsus, and together they should be in width about one inch less than the circumference of the limb at the corresponding part. A rough guide to the shape of the splint may be found in the injured person's stocking when it is laid flat on a table. Each splint is constructed of two layers of the flannel; the outer layer carries the gypsum; the inner layer forms a dry, warm, elastic lining, and protects the skin. These splints are applied by means of the muslin bandages. The bandage is put on like any other, from the toes to the knee; one thickness is enough. Two bandages of five or six yards in length are more convenient than one of twelve yards.

To Make the Splints.—1. A piece of house-flannel or an old shrunk blanket, or any suitable substitute, is selected. The pieces may be shaped by measurement, taking the circumference of the limb above and below the knee, at the biggest part of the calf just above the ankle-joint, from the front of the ankle-joint round the heel to the front again, and at the middle of the metatarsus. The flannel of each splint should be in width half an inch less than half the circumference at any of those points. The width of the two splints should be one inch less than the circumference of the limb at any corresponding part; it should be long enough to extend from above the knee to the middle of the metatarsus. Four pieces are required—two for each splint. 2. Two bandages of common muslin are prepared, each five to six yards long, and two inches and a half in width. 3. A handful or two of good dry plaster is mixed with water to the consistency of thin cream. 4. The inside pieces of flannel may be laid on the table or bed, the outer surface being upwards. 5. The outside

pieces are to be soaked in the plaster separately, and laid out on their respective inside pieces.

Application.—Whilst traction is kept up, and the ends of the broken bones are maintained in apposition, the splints are to be applied and smoothed; then the bandage is to be put on. Traction is to be maintained during the hardening of the plaster. The latter takes place in about three minutes. Next, the limb should be laid on a large soft pillow, the toes directed upward, and the knee a little bent. In the application of the bandage, great caution should be observed that it is not drawn tightly anywhere, and that no one turn of the bandage is tighter than another. The support is to be equal everywhere. The two splints should not meet by about half an inch, either down the front or back. The intervals are spanned by the dry porous muslin; at the sides the bandage is fixed to the splints by the plaster which oozes into it from the outer layer of flannel. If it become necessary next day, or later, to ease the splints or to inspect the limb at any spot, the bandage can be slit up with scissors along the middle line in front. One or both of the splints can then be eased from the limb, and readjusted by the addition of another bandage. It is undesirable to wholly remove the splints. They are hinged together at the back by the muslin bandage which spans the interval there. The trimming of the apparatus may be done as soon as the plaster shall have hardened. Should the surgeon be short-handed with regard to assistance, he may apply the outside splint first, and lightly bandage that on; and when that splint has nearly hardened, he may put on the inside one. As swelling subsides, and the splints become more or less loose, an additional bandage should be put on. At the end

of ten days, if the patient be convalescing, the outside bandage may be gummed, or a fresh gummed bandage rolled on. That apparatus will last until splints are no longer needed. At the end of a fortnight, or three weeks as the case may be, the patient may leave the hospital for his own home.

This mode of treatment is admirably adapted to oblique fractures, accompanied by displacement of the tibia, to cases of Pott's fracture, and to comminuted fractures.

The Influence of Fracture on the Growth of Bones.

According to some observations reported to the Academy of Medicine in Ireland by Mr. J. Davidson (*Lancet*), fractured bones exhibit a marked increase in size in all dimensions, being both heavier and longer.—*Ibid.*

Traction Suture.

Dr. OSCAR H. ALLIS (*Annals of Anat. and Surg.*):

It not unfrequently happens when a large portion of integument has been cut away—as in removal of the female breast—that the healthy borders cannot be fully approximated; and even an attempt to do so is accompanied with such a degree of tension that the sutures soon cut their way out. To distribute this tension, I have employed the following device: After drying the skin thoroughly, I apply strips of adhesive plaster from the margin of the wound in the direction I wish the sutures to hold. I then pass my needle deeply through plaster and skin. After the sutures are in position, and before tightening them, I request an assistant to approximate the margins of the wound by pressure from his hands, while I secure them by twisting the wire.

Sutures employed in this manner have a firm hold upon the plaster, exert their traction upon a large surface, are less irritating and harmful, and will continue an efficient action much longer than the ordinary integument sutures.

The Treatment of Fracture of the Larynx.

The *Lon. Med. Record* tells us that Dr. W. WAGNER, of Konigshutte, in a contribution to the *Centralbl. fur Chir.*, No. 23, 1883, points out that fracture of the larynx is very rarely met with, and that not even the most experienced surgeons are in a position to derive from personal experience fixed rules for treating this injury. Most observers, however, agree that in such cases the first indication is the performing of tracheotomy, in order to prevent suffocation. Occasionally, where there is much displacement of the fragments, it is advisable to perform thyrotomy. A case is reported of multiple fracture of the larynx which led the author to consider the subject of the treatment of this injury, and convinced him that further therapeutic measures were necessary beyond opening the trachea. The subject of this case was a robust and very powerful man, whose neck had been forcibly squeezed in a fight. He remained unconscious for about half an hour, and on recovering himself found that his breathing was very bad. On the following day, when the patient first came under the notice of Dr. Wagner, there was extreme dyspnoea; and, with coughing, much blood, partly fluid, partly coagulated, was brought up. The face, neck, and surface of the thorax were distended through emphysema. There was found to be free abnormal mobility of the left wing of the thyroid cartilage; and during the prompt performance of superior tracheotomy the

cricoid was found to be also fractured, and partly torn away from the upper ring of the trachea. The patient did well up to the third day after the date of operation, when signs were presented of hypostatic pneumonia on the left side, and there was a complaint of acute pain beneath the sternum. On the evening of the fourth day there was free bleeding from the wound in the trachea, and on the following day the patient died. On *post mortem* examination there was found to have been mediastinal emphysema and suppurative mediastinitis. The lungs, with the exception of the lower lobe on the right side, appeared quite healthy. Dr. Wagner thinks now that in any similar case of laryngeal injury thyrotomy would be indicated, not so much for the purpose of replacing any fragments of cartilage, as for rendering the seat of fracture antiseptic and for maintaining for a time this antiseptic condition. In a recent case of this kind he would, after having plugged the trachea, incise the larynx in the middle line; and then separate the two wings of the thyroid cartilage so as to be able to see the whole of the interior of the larynx and to apply some antiseptic fluid. He would then plug the interior of the larynx with small pieces of iodoform gauze. The wound would thus be rendered antiseptic, the fragments of broken cartilage be kept at rest, and the risk of hemorrhage be diminished. If there be no longer any danger of infection, a late thyrotomy, it is held, is still justifiable if performed with the view of putting displaced fragments of cartilage in a better position, and, if the thyroid cartilage be fractured, of uniting the alæ by silver suture. If the fragments of the thyroid cartilage cannot be thus united, or if stenosis cannot be prevented, Dr. Wagner would

advocate extirpation of the partially detached portion of thyroid cartilage, and even removal of half the larynx. In a case reported by Billroth in which this partial operation had been performed, a good voice was retained; and, at all events, the patient is thus placed in a better position than that of having to go through life with a completely useless and much obstructed larynx.

Prescriptions for Dressings.

We translate the following from the Bohemian *Rundschau für Pharmacie*:

Purified Cotton-wool (freed from grease).—Macerate ordinary cotton-wool in benzine for ten minutes, press, and dry in air. Use this in the recipes which follow.

Carbolized Cotton-wool.—Take about 1 kilogramme of purified cotton-wool and well soak it in 2½ litres of the following solution: Carbolic acid, 100, colophony 400, castor oil 400, alcohol 2,000 parts. Spread it out for a quarter of an hour to dry.

Antiseptic and Styptic Cotton-wool.—Prepared as before, with a solution of tannin 5, carbolic acid 4, alcohol 50, and castor oil 8 parts.

Styptic Cotton-wool.—Prepared as before, with a solution of alum 2, water 12, and chloride of iron solution 2 parts. To be dried at 60° C.

Benzoated Cotton-wool.—Prepared as before, with a solution of benzoic acid 5, castor oil 2, alcohol 250 parts.

Salicylated Cotton-wool.—Prepared as before, with a solution of salicylic acid 5, castor oil 1, colophony 1, alcohol 250 parts.

Boric acid Cotton-wool.—Boric acid 10, water 80, glycerine 10 parts, to make the solution, which use warm, and dry at 60° C.

Borocarbolated Cotton-wool.—For the

solution, use boric acid 5, carbolic acid 2, alcohol 5, water 80, glycerine 10 parts.—*Drug News*.

Flax as a Dressing for Wounds.

In *Vratch*, Dr. MAKUSCHINA recommends it as a cheap and convenient surgical dressing. It is prepared as follows: Small bundles of flax are boiled for three hours in ordinary lye-water, and then left to soak in the same for eight or ten hours. After that it is washed five or six times in clean water, dried and combed out. It loses about twenty-five per cent. in weight, and is a perfectly white, soft material, much more hygroscopic than before being so treated. It is several times cheaper than absorbent cotton, in Russia at least.—*Med. and Surg. Reporter*.

Cellulose as a Surgical Dressing.

Many as are now our articles for surgical dressings, Dr. FISCHER, of Trieste, proposes in the *Zeitsch. f. Therap.*, that we should add cellulose to the list. He claims for it the following advantages: 1. It is absolutely free from substances capable of exciting putrefaction. 2. It has a very low specific gravity. 3. It produces neither eczema nor erythema upon the epidermis. 4. It retains moisture and heat perfectly, for more than twenty-four hours. 5. It never adheres to granulating wounds on the surface of the skin. 6. It adapts itself perfectly to the outline of the place of application. 7. It is much cheaper than other materials heretofore used for similar purposes.—*Ibid*.

The Permanent Bath in the Treatment of Surgical Diseases.

In cases after operation in which the ordinary antiseptic dressings cannot be

conveniently applied, owing to the location or other conditions of the wound, Dr. SONNENBURG advises a return to the permanent bath. He has met with considerable success by this treatment after operations upon the urethra, rectum, or uterus, or in lithotomy. In the after-treatment of amputation or resections he has found it also useful. The addition of antiseptic substances to the water of the bath, he considers to be unnecessary.—*Centralblatt für Gynäkologie*.

A Useful Hint.

To prevent the skin from discoloring after a blow or fall, take a little dry starch or arrow-root, merely moisten it with cold water, and lay it on the injured part. This must be done immediately, so as to prevent the action of the air upon the skin. However, it may be applied some hours after, with effect.—*Med. Brief*.

Malignant Pustule.

At a recent seance of the Académie des Sciences, M. RICHER read an interesting communication on this subject.

In 1880, two cases were observed in his service at the Hôtel Dieu; the first was a butcher, who presented a sore on the right cheek, accompanied by considerable induration of that side of the face and neck; the general symptoms were of a very grave character.

Serum, taken from the sore itself, and some blood obtained from the index finger, were introduced under the dermis of several animals, and all thus treated perished, presenting all the symptoms of malignant charbon. The patient was energetically treated, subcutaneous injections of iodine solutions were made all about the sore, and the actual cautery applied.

The local troubles were somewhat ameliorated, but the general condition became graver, and the patient succumbed in 48 hours.

In the second case also the general symptoms were of great gravity, the temperature very near 104° , pulse 108, great thirst, with extreme prostration. All about the sore, down to the neck, there was a hard, œdematous swelling; the lymphatic glands under the lower jaw were swollen and painful. Neither the blood taken from the finger nor the serum of the pustule contained germs or charbon bacteria, as in the first case. Nevertheless, the liquids about the sore communicated the charbon infection to animals inoculated with it.

The treatment in this was similar to that practiced in the other—injections in seven or eight points in a circle about the sore, of from four to eight grams of tincture of iodine, diluted with twice the quantity of water. The patient recovered, showing that if the case be energetically treated before the infection becomes generalized, a complete and rapid cure is possible.—*Med. and Surg. Reporter*.

Malignant Pustule Communicated by a Fly.

The *Jour. Cut. and Ven. Dis.* reports the following:

A somewhat remarkable case is reported in the *Gaz. des Hôpitaux*, No. 102, as having occurred in the service of M. MOLLIÈRE, surgeon-in-chief to the Hôtel Dieu at Lyons. The patient was bitten on the cheek by a large black fly which he immediately killed. The bitten spot in a few hours began to itch violently, but no swelling appeared until the next day. When the patient entered the hospital the whole cheek was of a livid color and enormously swollen, especially over the malar bone, the centre of which region was oc-

cupied by a small black phlyctena surrounded by a number of transparent vesicles. The eyelids were considerably swollen, and one of the submaxillary glands was enlarged and tender. There was no fever or other constitutional symptom. M. Mollière's treatment was prompt and energetic. He first completely destroyed the pustule by means of the thermocautery, and then injected the swollen parts, including the submaxillary gland, with a twenty per cent. solution of phenic acid. The only internal remedy employed was alcohol, which was administered in enormous quantities without producing the slightest sign of intoxication. The affected surface began to slough off on the third day, and in another week was entirely detached. The healing process proceeded rapidly, and at the end of three weeks the patient was discharged. Blood and serum drawn from the vicinity of the pustule having been forwarded to an expert for examination, he succeeded in detecting a few filaments of the bacillus anthracis, and a cobaye which was inoculated with the fluids, died in a few hours with all the signs of specific gangrenous infection.—*Ibid*.

A Note on the Treatment of Malignant Carbuncle and Bubo.

Dr. M. L. NARDYZ (*Med. Times*): The carbuncle, malignant bubo, and phagedæna are all local inflammatory processes, more or less dependent upon constitutional cachexia. Various causes operating upon the system so as to lower its vitality may be generally discovered by careful examination: in the former, senile enfeeblement, infirmity, and chronic debility from disease, or a condition of habitual repletion and irregularity of circulation, and connected with every species of excess; in the latter, there is the action of specific animal or

mineral poison. In such conditions of the system these formidable local manifestations are sometimes developed upon the slightest local irritation. Thus, a furuncle of a young and healthy individual would be a carbuncle in one of an unhealthy character. The bubo of plague and that produced by the flesh of diseased animals is symptomatic of the poison which pervades the system; and the frightful cases of phagedæna which we sometimes witness in hospital practice are in most cases not to be explained by reference to the character or amount of the injury, mechanically considered, and result, therefore, from the operation of some powerfully-depressing cause upon the *vis vitæ* of the individual.

Of the same description, doubtless, in this respect is the horrible disease termed hospital gangrene and malignant ulcer, of which, however, we know little or nothing from personal observation.

I do not mean by these remarks to underrate the value of local treatment in such cases; it is most essential to facilitate nature's operations; but I mean to convey the idea that the local malady is symptomatic, whether commencing spontaneously or in consequence of lesion, and that calming and supporting the constitutional action is the efficient method of treating such diseases, whether that be done by local or general treatment, or both. And there can be no occasion to illustrate the fact that surgical local treatment, as the division of structure, the renewal of the surface, is in many cases most influential in accomplishing this great purpose.

The practical objects to be effected, if possible, in carbuncle and phagedæna, are the arrest of the gangrenous inflammation and the establishment of a free suppuration from the line of separation

between life and death. Whenever this can be obtained there is reason to anticipate a favorable issue; and when it fails, and dryness is the condition of the sore, the contrary is to be looked for. A dry carbuncle is invariably fatal, in my experience.

Hypogastric Cystotomy.

The following conclusions regarding hypogastric cystotomy as a substitute for the perineal operations are drawn by Prof. S. VILLENEUVE (*Med. News*): 1. The hypogastric operation, which hitherto has been used only exceptionally, appears to be coming into more general, though not exclusive use, for the performance of cystotomy. 2. It should be performed with the newly perfected instruments made for it: ballonnement (ballooning the rectum by means of an air ball), vesical injection, pushing back the peritoneal cul-de-sac, connected syphon tubes, and antiseptic precautions and dressings. 3. Suture of the bladder should be discarded, but immediate union should always be attempted, which if realized shows the great superiority of the hypogastric operation. 4. The hypogastric operation is one of necessity in cases of large and encysted stones, intolerant bladder, and impermeable or strictured urethra or vagina. 5. Especially is the operation to be recommended in old persons and adult men, and in those cases in which lithotrity is not applicable, and which up to the present time have only been treated by the different perineal operations. 6. In male infants, it may be presumed that it is at least equally as good as the perineal operations. But the happy results obtained by these operations for a long time render the indications of the high operations in these cases less pressing. 7. In female children and females at the age of puberty, the hypogastric operation

is the method of choice. 8. In married women the question of choice between the hypogastric and vaginal operations is undecided. 9. An inflammatory affection of the uterus, marked deformity of the bladder on account of deformity of the uterus, and notably cystocele, should lead one to adopt the high operation. In adult females the hypogastric operation should be preceded by dilatation of the urethra. 10. Constitutional and diathetic affections have no special indications in selecting the method of operation. The same holds good for lesions of various branches of the sympathetic plexus.—*Weekly Med. Review.*

Urethral Calculi.

In a recently published monograph upon calculi in the male urethra, Dr. MAXIMILIAN ZEISSL relates several hitherto unreported cases of this affection. Most frequently the calculi have a renal origin, but sometimes are formed in the urethra itself from particles of mucus which become lodged behind a stricture, in the bulbous portion of the urethra, in the fossa navicularis, or in some diverticulum. They may also be formed from some pieces left behind after an operation for stone in the bladder. The lumen of the urethra is narrowed and sometimes completely closed by the continued growth of a calculus. In other cases, stones are formed about foreign bodies introduced from without. Frequently the stones are seen to be channelled out on one of their sides, so as to afford a passage for the urine. The diagnosis of urethral calculi may present great difficulties when they lie in a diverticulum, and also at times when they occupy the prostatic portion. When the urethra is large, it is sometimes possible to push an impacted

stone back into the bladder, and then extract it through a large-eyed catheter. If this procedure fails, the calculus is to be removed by an instrument adapted to the purpose, or by direct incision through the wall of the urethra.—*Centralblatt für Chirurgie.*

Cantharidin and Its Uses.

E. Dietrich, manufacturer of plasters, dressings, etc., in Helfenberg, advocates the abandonment of cantharides as an ingredient in blistering tissues, and the employment in its place of the active principle, cantharidin.

The best solvent for this principle is formic acid, which itself occurs in cantharides; the stronger the acid the greater is its solvent action.

If cantharidin is to be dissolved in collodion, oil, or the mass of the plaster, it is advisable to rub it first to a very smooth paste with oil. In this shape it is soluble in collodion by mere shaking; in oil and plaster it dissolves on being heated for half an hour to 80° C. (176° F.).

Cantharidal Collodium.—Cantharidin, 1-20 gr.; collodion, 15 grs.; rape oil (as coloring), $\frac{3}{4}$ gr.

Ordinary Cantharidal Plaster.—Cantharidin, 1-16 gr.; suet, 3 grs.; yellow wax, 12 grs.; turpentine, 3 grs.

Perpetual Cantharidal Plaster.—Cantharidin, 1-64 gr.; resin, 10 grs.; yellow wax, 8 grs.; turpentine, 5 grs.; suet, 3 grs.; euphorbium, powd., 1 gr.

Cantharidal Oil.—Cantharidin, 1-20 gr.; rape oil, 15 grs.

Cantharidal Ointment.—Cantharidin, 1-9 gr.; yellow wax, 45 grs.; olive oil, 100 grs.

Unguentum Acre.—Cantharidin, 1-32 gr.; yellow wax, $1\frac{1}{2}$ grs.; resin, 3 grs.; turpentine, 6 grs.; lard, 20 grs.; euphorbium, powd., 1 gr.

In all these cases the relation of cantharidin to Spanish flies is ample, about 1 to 200. In the case of some preparations, as the oil and ointment, loss is occasioned by heat, but this loss is made up by a proportionately larger quantity.—*Med. Brief.*

The Treatment of Abscesses of the Neck.

Dr. JOHN A. LIDELL, in a very instructive article on this subject in a number of *The American Journal of the Medical Sciences*, points out that sudden death may occur from deep-seated abscesses of the neck, or the continuance of life may be greatly endangered, much oftener than is generally supposed; and that these abscesses in the neck are more frequently attended with hemorrhages due to the opening of important blood-vessels by ulceration or erosion, and by *ramollissement* consequent upon the disorders themselves, than abscesses in the other surgical regions. The superior liability of cervical abscesses to the spontaneous occurrence of dangerous hemorrhages arises in part from the greater number and importance of the cervical blood-vessels; but more particularly from the inanition and exhaustion, or low state of the constitutional powers, and consequent feebleness of the reparative forces, which rapidly result from most of the deep abscesses of the neck, or rather from the inability to swallow enough food to support life, and from the powerlessness to get any refreshing sleep, or even repose, with which these abscesses are oftentimes attended. The septic or toxæmic influence of the fetid secretions and exudations which present themselves in the oral and faucial cavities in many instances, also aids materially to still further depress the patient, and weaken the reparative processes of his system.

These deep-seated abscesses of the neck, when allowed to run their own course, do not exhibit any tendency to a spontaneous cure; but, on the contrary, they always tend to destroy life by burrowing or spreading, etc.; and Dr. Lidell shows that the earlier they are laid open and evacuated the better for both patient and surgeon. As soon as fluctuation is discerned, the abscess-cavity should, without delay, be freely laid open, the coagula turned out, the bleeding-point, or source of the hemorrhage, brought distinctly into view, and the delinquent vessel itself should be ligatured on each side of the aperture in its walls. But should the ligatures cut through, the actual cautery must be applied to the bleeding point, the primitive carotid artery should be firmly compressed against the cervical vertebræ by the surgeon's thumb or fingers applied on the anterior part of the corresponding side of the neck, between the larynx or trachea and the inner border of the sterno-cleido-mastoid muscle, with force enough to press the artery backward and inward against these vertebræ, and flatten it thereon. Should this procedure fail, it will be advisable, especially in cases where the bleeding proceeds from tonsillary abscesses, to ligature at once the primitive carotid artery.—*Med. Record.*

A Novel Method of Bleeding.

The *British Medical Journal* notes the relief of a case of cerebral congestion through blood-letting by means of a novel device. The patient, a fat, plethoric lady, fifty years of age, came under the charge of CHAS. COPPINGER, F.R.C.S.I., and at the time of the surgeon's visit was in a condition of stupor, out of which she could be roused with some effort, but only to relapse into

sleep again. Her breathing was heavy, and she presented all the symptoms characteristic of an overloaded vascular system. The indications for treatment were plain, and leeches not being obtainable, depletion by means of venesection was proposed. The friends of the patient, who were ladies, gave their consent, but were horrified at the suggestion of so barbarous a proceeding, and Mr. Coppinger anxious to spare them the sight of blood, then and there conceived the idea of substituting the aspirator for the lancet. The patient, who had not long before been treated for hemicrania by hypodermic injections of morphia, was roused up and told that the needle was about to be "inserted into the skin of her neck, to which she at once consented." The needle of the aspirator was then passed into the external jugular vein, which was much distended, and four ounces of blood were withdrawn without difficulty. The result of this trial being satisfactory, the surgeon repeated the operation in the course of a half-hour, abstracting six ounces more of blood. The patient was speedily relieved of her alarming symptoms, and neither she nor her attendants suspected that she had been bled, until the procedure was subsequently explained to them.—*Ibid.*

VENEREAL DISEASES.

Localized Blennorrhagia in the Female.

BOUTIN (*Th. de Paris*) says :

1. Blennorrhagia in the female has a marked tendency to localization in certain well-determined points of the vulva or the vagina, either primarily, or when the inflammatory process has somewhat diminished.

2. Generally, blennorrhagia localizes itself in the glands of the genital apparatus

3. Blennorrhagia may localize itself exclusively in the vulva. This constitutes blennorrhagic vulvitis.

4. But it may offer more intimate localizations and secrete itself within the glands of Bartholin, in the peri-urethral follicles, or in the disseminate glands, at the level of the labia minora or the fourchette.

5. Blennorrhagic Bartholinitis is quite frequent. It may present the following forms :

The acute form, terminating by resolution or induration, rarely by suppuration. The sub-acute form, suppurating invariably, the blennorrhagic Bartholinitis then becoming complicated with a phlegmonous peri-Bartholinitis. The peri-glandular pus is not blennorrhagic, while the intra-glandular pus presents all the characters of blennorrhagic pus. The chronic form. If the inflammation occupies the body of the gland, then there are chances of complications of peri-Bartholinitis and of contagion ; while, if the inflammation be localized at the excretory duct, the chances are at the minimum. But the inflammation has a natural tendency to invade the body of the gland.

6. The peri-urethral folliculitis may be Simple. It then presents well-defined clinical symptoms. Hypertrophic. It then becomes the point of departure of urethral polypi. Suppurating. In this last condition, the disease is contagious. The contagion is effected by the introduction of a drop of blennorrhagic pus into the canal of the urethra, one of these follicular abscesses being broken during the act of coition.

7. Blennorrhagia rarely localizes itself in the glands of the labia minora or in the form of a patch in one or several vulvar glands situated at the level of the fourchette.

8. All the points of the localization

of blennorrhagia may become exulcerated under the influence of inflammation, and thus become a point of entry for the chancrous or syphilitic virus.

9. Blennorrhagia may localize itself, when it occupies the vagina, in the *cul de sac*, in the folds which are observed on the mucous surface, in the uterine neck, or even in the cavity of the uterus itself. In the latter two cases, it is frequently complicated with peri-uterine accidents, by the intermediary of a lymphangitis or of a juxta-uterine adenitis (adeno-lymphitis), which especially lead to adeno-pelvi-peritonitis.

10. It is rare that blennorrhagia localizes itself in the rectum; nevertheless, this fact has been observed, especially in the female.

11. It is important to recognize localized blennorrhagia in the female, and not to confound it with dermatoses, such as herpes or zona. Blennorrhagic Bartholinitis should be differentiated from traumatic Bartholinitis and cysts of the vulvo-vaginal glands.

Likewise it is important to distinguish peri-urethral folliculitis from inflammatory vegetations, and blennorrhagic vulvitis from simple vulvitis. Physicians ought also to be able to refer a blennorrhagic metritis to its true cause.

12. The prognosis should embrace two factors :

a. The patient is, by the fact of her localized blennorrhagia, subject to acute recurrences of a severe character.

b. She may become contagious, if any circumstance whatever should reawaken the chronic inflammation and induce the least possible puriform or purulent condition.

13. In order to radically cure the disease, it is necessary, after the subsidence of the acute symptoms, to modify the inflamed points by energetic cauterizations, to even incise the gland of Bar-

tholini and induce suppuration, if it should be the seat of localization of the blennorrhagia.

A Useful Suggestion Regarding Catheters.

Dr. HÜPEDEX calls attention to the danger of infection attending the use of catheters as at present constructed. The defective and dangerous portion of the instrument is the blind end beyond the eyes. The most careful cleansing may fail to destroy or remove all infectious matter from this part, and thus some disease may be communicated to the next patient upon whom the instrument is passed. To obviate any such risk it is only necessary to fill up with some solid material this blind extremity.

—*Centralblatt für Chirurgie.*

An Operation for the Cure of Masturbation.

Dr. TIMOTHY HAYNES records, in the *Boston Medical and Surgical Journal*, the removal of parts of the spermatic ducts.

The operation, which was the same in all three cases reported, was as follows :

An incision midway between the external inguinal ring and the testis laid bare the duct, from which a half inch was resected, and the slight wound closed by sutures.

By this simple operation, leaving behind it no deformity of the genitals, he has succeeded in all three cases in improving the mental and physical condition of his patients, while the sexual appetite was as effectually destroyed as by castration.—*Med. and Sur. Reporter.*

Earache.

The vapor from five drops of chloroform placed on a little cotton wool in the bowl of a *clay pipe* and blown through the stem into the offending ear, will afford almost instant relief.

Amputation of the Penis, with Transplantation of the Urethra into the Perinæum on account of Epithelioma.

Dr. JOHN A. WYETH (*N. Y. Med. Jour.*): F. F., aged fifty-six, a German by birth, married, and a cabinet-maker by trade, presented himself, March 9, 1883, for treatment at my clinic, at the New York Polyclinic, having been sent to me through the courtesy of Dr. C.W. Pfeiffer, of this city.

He gave the following history to the class: Ten weeks before, he noticed a pimple on the prepuce, which had always been adherent to the glans. He denied all venereal disease and the possibilities of contagion. From the initial pimple the disease had spread, slowly at first, but more rapidly within the two weeks prior to his applying for treatment.

The anterior third of the penis was greatly swollen (as represented in Fig. 1, made from an accurate drawing by my friend Dr. J. A. Andrews) and on one side, about one inch and a half from the meatus, there was a phagedenic perforation of the tissue, through which the entire flow of urine escaped. The inguinal and lumbar glands were slightly enlarged, and the skin of the patient was of a pale-yellowish hue.

The diagnosis of epithelioma was made, and was subsequently confirmed by my colleague, Dr. Gerster, and by my friend, Dr. E. A. Banks, whose wide experience in diseases of the genito-urinary organs has been of invaluable

assistance to me. Amputation was advised for the following reasons: The stench from the phagedæna was exceedingly offensive. It was doubtful whether the glands were enlarged as a result of inflammation or of metastasis. The comfort of the patient was greatly interfered with, and it was believed that his life would be prolonged by the operation.

The operation was performed before the surgical class of the Polyclinic, in the operating-room of Mount Sinai Hos-



FIGURE 1.

pital, on March 18, 1883. The procedure was that which is advised by Humphrey in Holmes's "Surgery." A ligature was applied around the organ close to the pubes, and the penis was cut smoothly off as near the ligature as was possible. The bleeding vessels of the corpora cavernosa having been tied,

the scrotum was transfixed at the perinæum, and the urethral tube was dis-

perinæum. The temperature, which had been as high as 102.4°F. previous to the operation, was 102.2° fourteen hours after, and declined to 99°. The wounds healed promptly, the patient was discharged on May 14th, and in June he returned to his work.

I saw him a few weeks after this date, and found that the glands were of normal size, his skin had assumed a more healthy color, he had gained in weight and strength, and he believed himself cured. He urinated freely through the new opening, and was comfortable. Since that time I have not heard from him, as he changed his address and has not reported to me.

The microscopical examination of the tumor proved it to be epithelioma.

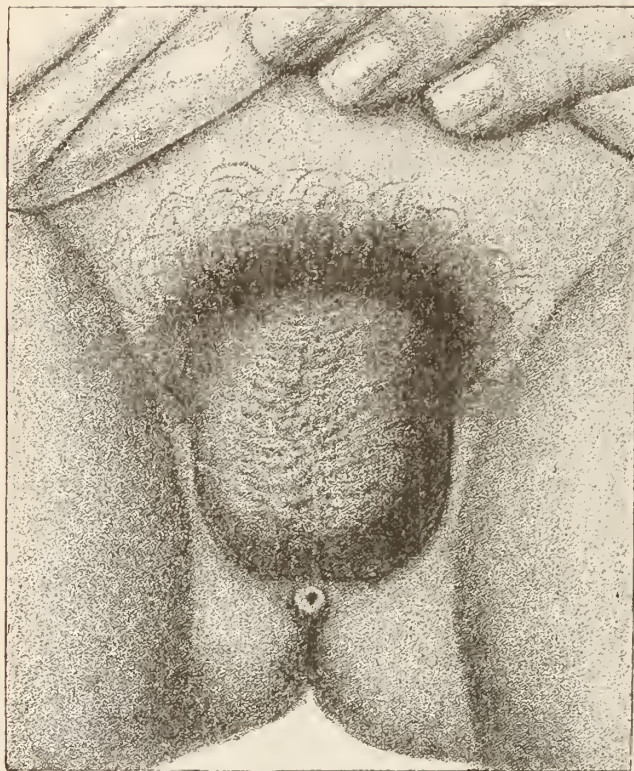


FIGURE II.

sected out from between the corpora cavernosa for an inch and a half, and then turned back through the scrotum to the perinæum, where the end was split up for half an inch on the upper wall, and the edges sewed to the incision in the perinæum.

The scrotum was carried up and sewed to the integument of the pubes, completely covering in the stump of the penis.

A drainage-tube was passed through the scrotum from the upper incision to the lower projecting part in front of the urethral opening in the

DISEASES OF THE SKIN.

The Local Treatment of Acne Simplex and Rosacea.

In a recent thesis, an abstract of which we find in the *Journal of Cutaneous and Venereal Diseases*, M. MORIN says that this can be satisfactorily carried out only by direct action upon the malady at its original seat. The following is the method devised and recommended by the author: He takes a fine darning-needle, having an eye

somewhat longer than that of a sewing-needle. Holding this by the point, he introduces it into the affected gland by a rotary movement which causes some of the sebaceous matter to lodge within the eye of the instrument. The latter is withdrawn, cleansed, and re-introduced, and the operation is repeated once or twice until, the gland being emptied, its floor is touched by the needle, when a slight pricking sensation is experienced. The same needle, or another similar one, held in the same way, is then dipped in an alcoholic solution of iodine—of greater or less strength, but never weaker than that of the French pharmacopœia—and is again passed into the gland, charged with a drop of the iodine tincture, which is thus brought into immediate contact with the focus of the disease. After a few minutes a clear liquid, slightly colored by the iodine, will exude from the gland, sometimes in a drop as large as a tear. This flow will cease within an hour. Twenty-four hours later, in cases of acne simplex, the inflammation, when unaccompanied by suppuration, will have wholly disappeared. If suppuration, however, had existed, it will be found perceptibly diminished, needing only two or three repetitions of the process to effect its entire cessation, followed by a permanent cure. Rosacea, being of a more intractable character, requires the application to be made several times, when results equally favorable will certainly be obtained. The advantages claimed for this mode of treatment over any local measures previously employed are: That it is easily carried out; produces no additional disfigurement; is painless; does not necessitate the seclusion of the patient, and may be relied upon to effect speedy cures even in cases otherwise hopeless.—*N. Y. Med. Jour.*

Subnitrate of Bismuth as a Remedy for Profuse and Fœtid Perspiration of the Feet.

M. VIEUSSE, Surgeon-Major, military hospital of Oran (*Gazette Hebdomadaire de Médecine et de Chirurgie*), advocates the use of subnitrate of bismuth locally in the treatment of profuse and fœtid perspiration of the feet. In an experience of fourteen years he has met with but one case that was not fully amenable to this treatment. It is adapted to all the forms, or rather degrees of severity in which this comparatively trivial, but nevertheless annoying and disgusting affliction is encountered. Five to seven drachms of the powder should be rubbed daily into the feet, not neglecting the surface between the toes. From five to fifteen days usually suffice to effect a permanent cure. There is no reason to fear that the checking of the perspiration will be followed by the establishment of some compensatory trouble, as has been alleged by certain writers. M. Vieusse attributes to the bismuth a purely local action. Under the action of the sulphydric acid of the perspiration "the bismuth loses part of its base, and, becoming acid, it exercises an astringent and slightly caustic action upon the skin." In consequence, the epidermis becomes stronger and firmer, and separates with less facility from the subjacent derma. The better tone thus imparted to the skin tends to lessen the amount of blood circulating therein, and this, in turn, diminishes the secretion of the sudoriparous glands and the sebaceous follicles. At the same time, the derma, protected by a thicker and more resistant covering, does not become denuded, and, therefore, the pain due to such denudation ceases.

M. Vieusse cites one case in which the suppression of the sweating was but temporary. However, even in this case the offensive odor and the pain were permanently stopped.—*Ibid.*

External Application in Acne Rosacea.

The following preparation is recommended by HELMAYEN: R. Slaked lime, 1 part; sublimed sulphur, 2 parts; water, 20 parts. To be reduced by heat to twelve parts.

This is to be used for topical applications to the affected parts, and must at first be diluted with five parts of water, but gradually it may be used in a more concentrated form.—*Med. & Surg. Rep.*

DISEASES OF THE EYE AND EAR.**Massage in the Treatment of Hypopyon.**

By gentle pressure and light friction over the eyeball through the lower lid, Dr. JUST has succeeded in diminishing the purulent collection in the anterior chamber and causing it to become mixed with the aqueous humor. In several cases of hypopyon treated in this way he has seen absorption occur very rapidly. Dr. Hirschberg obtains similar results, when the collection of pus is not fixed, by causing the patient to turn frequently from side to side, changing the position hourly. Dr. Klein has employed massage also in other affections of the eye, such as phlyctenular conjunctivitis and diffuse parenchymatous keratitis. It is contra-indicated when it causes pain or provokes a persistent ciliary irritation.—*L'Union Médicale.*

Ocular Troubles of Nervous Origin, Especially of Dental Caries.

Dr. WEINBERG (*Recueil d'ophtalmologie*) has studied certain alterations of the eye, which are produced by extra-orbital lesions, chiefly among which is dental caries. These are of two kinds. A decided conjunctivitis, rebellious to treatment. On carefully examining the teeth, caries of one or more is found, without ever

having caused pain. After its extraction, conjunctivitis immediately subsides. It is clearly a morbid reflex phenomenon. But there are others where patients do suffer from toothache, and with whom the conjunctiva is red, the cornea opalescent, slightly ulcerated; hyperæmia of conjunctiva even provoke a chemosis, sight may become largely disturbed, a very serious complication which may be caused by a different reflex phenomenon, namely an extension of a dental neutritis to the ophthalmic branch.

The most frequent are peri-orbital neuralgia, next asthenopia even mydriasis, abscess of the cornea, and exophthalmus with all its consequences.

Irritation of the uterus may bring about ocular troubles, especially keratitis phlyctenulosa, or regular monthly conjunctivitis. The galactophorous glands, may, as well as the uterus, be the starting point of a reflex irritation of the eye. There are women who suffer from herpes cornea and conjunctiva and parenchymatous keratitis, as long as they nurse their infants, which subsides spontaneously as soon as the children are weaned.—*St. Louis Med. and Surg. Jour.*

The Therapy of Spasmus Nictitans.

Under this head, Dr. FRIEDR. BETZ relates the history of a boy, fourteen years of age, who had suffered for several years from a bilateral nictitating spasm of the lids. Several physicians had attempted to relieve him, but in vain. The boy was healthy, and his eyesight good. He had, however, quite long eyelashes, and the edges of the lids were reddened. Betz performed epilation of numerous lashes above and below on both eyes. The result was immediately successful.—*Memorabilien. —Med. Record.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A Splint for the Treatment of Deformity at the Knee-Joint due to the Reflex Muscular Spasm of Chronic Osteitis.

Dr. JOHN F. RIDLON (*Med. Record*): Fig. 1 is from a photograph showing the splint and key. The splint consists of two bars of annealed steel joined in an antero-posterior hinge, the action of which is regulated by a section of a toothed wheel and an endless screw worked by a key, and two pieces of sheet steel lined with flannel and chamois, and rivetted to the bars.

To fit and apply the splint, mould the pieces of sheet steel, one to the anterior surface of the thigh, and the other to the anterior surface of the leg. With the aid of a pair of monkey-wrenches bend the bars so that they will lie along the anterior surface of the thigh and leg, and arch over the knee from point an inch or an inch and a half above the patella to the tuberosity of the tibia, about an inch away from the surface of the knee, and with the hinge directly anterior to the nominal centre of motion of the knee-joint in the lower end of the femur; then rivet on the pieces of sheet steel and sew on the lining. Half a dozen holes should have been made in each bar, and numerous

small ones about the borders of the sheet-steel pieces by the instrument maker; but the holes in the sheet-steel pieces, through which the rivets pass, must be made by the surgeon at the time the brace is fitted, the rotation outward of the tibia in these cases necessitating this. The splint is then made fast to the leg by a roller bandage, as shown in Fig. 2, and extension made up to the

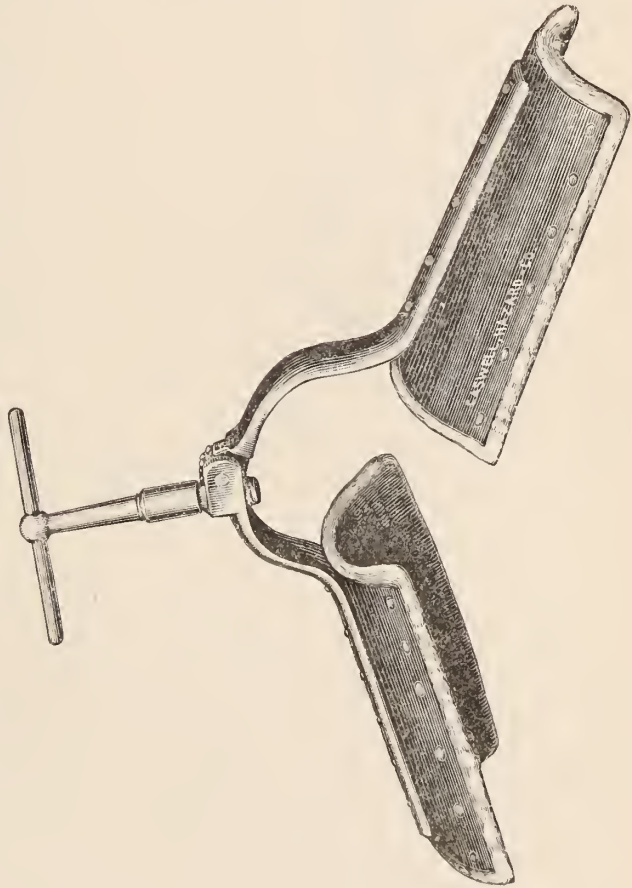


FIG. 1.

point that is most agreeable to the patient.

It is believed by some that fixation of a joint suffering from chronic disease is all that is necessary to relieve the pain, relax the muscular spasm and effect a cure, with more or less motion, the joint

having been coaxed, as it were, into a good position. Others hold that to obtain these results it is necessary to add traction to fixation. My own belief is that fixation is all that is required in most cases, but that there are a few

along the surface of the condyles, and there will be more or less pressure according to the degree of muscular spasm. But if the centre of motion of the splint be placed anterior to the joint at the point C a longer radius will be obtained, and if extension be made E will approach C', and the head of the tibia tend to be separated from the condyles according to the degree of extension exerted.

This splint should be used only where there is deformity due to reflex muscular spasm; and while the joint is very sensitive, the patient should be kept quiet in bed; later on he may be allowed up, but must use a crutch. I have not yet seen any "short splint" that will protect a joint suffering from chronic joint disease from injurious concussion in walking.

The patient weighing anywhere from thirty to one hundred and eighty pounds, and in walking

cases where traction is necessary to relieve pain. To this end I have placed the centre of motion of the splint anterior to the centre of motion of the joint. (See Fig. 3).

If the centre of motion (hinge) of the splint be placed posterior to the joint, as at A, and extension be made at any given point in the head of the tibia, as E, following the circumference of the circle of which A is the centre, will approach A' and the joint surfaces will be crowded together. If the splint be constructed with the centre of motion opposite the centre of motion of the joint (hinge at the side of the knee) at B and extension be made, E will approach B', the head of the tibia passing

the entire weight being thrown for a longer or shorter time on the affected side, the superficial tissues must be exceedingly tough if they bear a constant traction equal to this weight, whether made by a roller bandage or by strips of adhesive plaster. When the deformity has been overcome, I discard the short splint and use some form of apparatus that produces fixation, and at the same time acts as a perineal crutch. Fixation of the joint should be insisted upon as long as there is any reflex spasm. Ankylosis should not be feared, for it very rarely occurs—never, indeed, unless there has been excessive destruction of the bone. If it does occur, nothing that the surgeon



FIG. II.

could have done would have prevented it, for passive motion, by prolonging

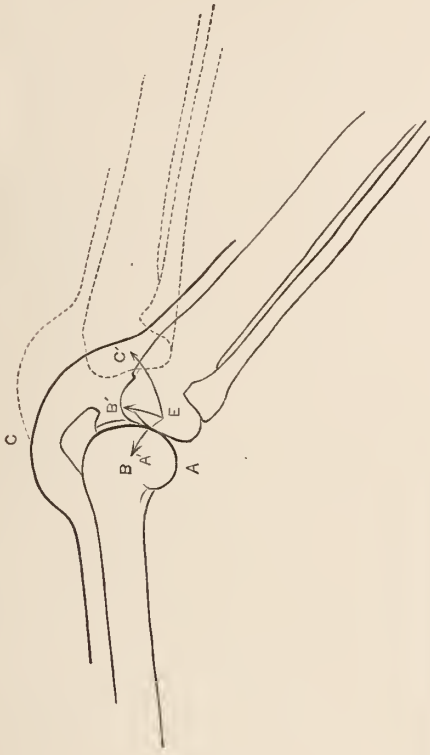


FIG. III.

the inflammation, would tend to cause rather than hinder it.

Dislocation of the Semilunar Cartilage of the Knee Joint.

Although this injury is described in all surgical text-books, we yet believe it is one that is not unfrequently overlooked, especially on its first occurrence. A gentleman falls down, and is picked up complaining of severe pain in the knee, with partial or complete immobility of the joint, which speedily becomes swollen. There is great likelihood that in these circumstances the diagnosis of "severe sprain" will be made and the real condition remain

unnoticed. The failure to replace the dislocated cartilage at the time, not only entails much suffering and interference with the function of the joint, but it very greatly lessens the probability of a complete recovery ever being accomplished. The cartilage may be reduced, but it fails to become firmly fixed in its place, and ever afterward there is a liability for it to slip out again during the free movements of the joint. When this happens, acute pain, possibly a fall as well, and temporary lameness are occasioned. There is therefore every reason why the surgeon should endeavor to recognize this particular injury on its first occurrence, and having recognized it to treat it properly. The accident happens during some sudden wrench to the joint, not necessarily severe; immediately severe, sickening pain arises, and the limb is fixed in the flexed position, although passive movement is possible. Synovitis quickly ensues. If the cartilage is displaced from between the bones, or marginally, it forms a projection just over the interval, between the femur and the tibia; but in some instances it is dislocated inward so as to lie between the two condyles of the femur, and then is quite beyond reach. In such cases the diagnosis must rest alone upon the cause of the accident—some wrench or sudden movement—the acute pain, and the fixity of the joint in the flexed position. The symptoms are more severe than those caused by a simple sprain of the joint from such an amount of violence, while, on the other hand, the slipping of a loose cartilage between the bones causes still more acute suffering, and the body itself can be felt at times. The first thing to do is to replace the cartilage by extreme extension immediately following upon full flexion of the joint. In some cases

the cartilage slips into place with a distinct snap, and in all cases the power of movement is at once restored. It is then important for the patient to wear a firm support to the knee for some months, which shall render impossible such a wrench of the joint as shall displace the cartilage, and if this is persevered in the cartilage again becomes adherent to the tibia. It is believed that the internal meniscus is more frequently displaced than the outer.—*Lancet*.

Cataract—Hare-Lip—Exsection of the Hip Joint.

Prof. WILLIAM H. PANCOAST closed the morning service with three interesting operations. One important point in the diagnosis of cataract is that the patient can see better in "half-light," in the morning or at twilight, because the pupil being then dilated, allows the light to pass around the opacity or cataract, while in the bright light, the pupil is contracted around the opacity, and thus the space for the omission of light is diminished. He prefers the needle operation, by which the cataract is broken up and pushed aside, when the cataract is soft and even sometimes when it is hard, because there is less shock and less danger than in extraction, though every case has to be studied and the appropriate operation decided upon. Before operation he always dilates the pupil well with atropia. In congenital cataract he advises immediate operation. Much delicacy is required in these operations about the eye, yet to see Dr. Pancoast operate for cataract one would suppose that it was a very simple matter; he certainly knows how to use his hands.

For hare-lip, he prefers the modified Malgaigne operation. He incises the

frænum and would even loosen the nose, if necessary, so important does he consider it to let the flaps lie loosely. He introduces pins and puts black silk sutures over them; each day he loosens or cuts one suture, to see if the pin is irritating the skin; if so, he removes it.

About the most forlorn-looking specimen of manhood that could be well imagined was brought in suffering from hip joint disease. He was going down hill rapidly, and it seemed evident to the class, as it did to Prof. Pancoast, that he was doomed. It was supposed that the head of the femur, as well as the acetabulum, were involved in destructive disease, the result of synovitis from "cold." The operation of exsection was performed and the diagnosis was verified. We will take interest in reporting the result of this seemingly hopeless case, in which Dr. Pancoast was much averse to operating, but where he felt, as all must have felt who saw it, that an immediate operation to relieve the poor wretch of his "life-drain," was the only possible hope he had.

To prevent bed-sores in these bed-ridden cases, Dr. Pancoast uses oxide of zinc ointment on patent lint fastened on with adhesive plaster and washes the "pressed upon" parts with alcohol and alum. The force that is requisite to dislocate a joint was well illustrated in the course of this operation, for even after all its attachments were divided, it required sufficient of the *considerable* strength of the operator, to dislocate the joint, to make him red in the face.—*Med. and Surg. Reporter*.

Double Colle's Fracture.

It is very rare to hear of such a case as that reported by Dr. R. J. BRYDEN

(*Brit. Med. Jour.*) wherein a young man of eighteen, falling from a height of thirty feet, and having his wrists doubled beneath him, received a perfectly symmetrical Colle's fracture of each wrist. The typical photograph accompanying the report, leaves no room for doubt as to the correctness of the diagnosis. Straight anterior and posterior splints, not reaching much beyond the wrists, and drawing the hands to the ulnar side, were applied.—*Med. & Surg. Reporter.*

Pathognomonic Sign of Fracture of the Neck of the Femur.

Prof. BEZZI, after showing, in the *Spallanzani*, the difficulties and uncertainties which often attend the diagnosis of this accident, observes that at the Milan Hospital a traditional practice exists of exploring, whenever fracture of the neck of the femur is suspected, the short space between the trochanter and the crest of the ilium. In place of the considerable resistance which is there produced in the sound limb through the tension of the tensor facię latę there is found, when the injury has occurred, a deep depression, due evidently to the diminution in the tension of this muscle, owing to the approximation of its points of attachment.—*Prësse Med. Belge—Practitioner.*

Compound Fracture of the Humerus Involving the Shoulder Joint.

Dr. L. A. STIMSON (*N. Y. Surg. Soc.*) presented a man, thirty-five years of age, who fell two stories, striking his arm, while on the way down, upon a railing, and producing a compound fracture of the upper end of the humerus, communicating largely with the shoulder joint, the wound extending from the coracoid process across the upper part of the arm. The wound was washed with

a bichloride solution, one to two thousand, partly closed by sutures, two drainage-tubes were inserted, and anti-septic gauze was applied. The interest in the case was confined to the plaster dressing which was used. It was a combination of plaster dressing upon the arm and a plaster jacket upon the body, united by three iron cross-pieces, which held them so firmly that the patient could be moved or turned in any direction without producing pain. Rapid recovery took place with a movable joint.—*N. Y. Med. Jour.*

Spontaneous Dislocation of the Hip Joint Occurring in the Course of Acute Articular Rheumatism.

Dr. STIMSON also presented a woman, thirty-seven years of age, who had an attack of rheumatism in December, 1882. The history of the attack was obscure, but the patient said that many joints were involved, that she remained ill for a long time, and that the deformity occurred as early, at least, as the following April. She finally came to Bellevue Hospital last summer, where Dr. Stimson saw her first in the month of September, and recognized a dislocation of the right hip joint backward upon the ilium. The interest of the case was partly in the rarity of the occurrence, and also in the facility with which the lesion might be overlooked. The subject has been recently written upon by French surgeons, and he had nothing to add except to say that the symptom of sudden cessation of pain, sometimes noted at the moment the dislocation occurred, did not appear to have been present in this case.

Sugar as an Antiseptic Dressing.

Dr. FISCHER states that Prof. Lücke, of Strasburg (*Centralblatt f. Chir.; Med. Times and Gazette*), has, since May last,

been making trials of sugar as a pulveriform antiseptic. He has used it mixed with equal parts of naphthaline or with a fifth part of iodoform, enclosing it in gauze bags, which are fixed over the wound after the application of sutures. When the skin is defective, the sugar is strewn over the wounded surface. The wound has been disinfected during the operation, by means of a one per cent. sublimate solution. The dressing may remain on the part from a week to a fortnight, until the sugar becomes dissolved, the secretions from the wound diffusing themselves equally throughout the sugar. If, however, the sugar is applied too thickly (*i. e.*, more than half a centimetre) it forms into lumps. The wounds thrive under the sugar, the dressing emitting no bad smell nor exhibiting bacteria. The granulations are well developed, having no inclination to bleed, and cicatrization proceeds rapidly. In wounds united by suture, primary union has always been obtained. The experience thus far gained justifies the recommendation of further trials of a remedy so easy to obtain.—*Med. Med. Jour.*

Carbolized Sawdust as an Antiseptic Dressing.

Dr. H. P. SYMONDS recommends it in the *Lancet*. He prepares it by soaking saw-dust in a 1-10 solution of absolute phenol and spirit of wine; he then allows it to dry slightly so that the spirit may evaporate, leaving the saw-dust charged with carbolic acid. When used, it is enclosed in a bag made of several layers of gauze, and applied outside the deep dressing, the usual external dressing being put over it. Its absorbent power is very great, and it keeps up an equable pressure on the divided tissues. The three points in its favor are its powerful an-

tiseptic qualities when saturated with carbolic acid, its great absorbent power, and its adaptability to any surface. The sawdust should be coarse, as, if it is very fine it passes through the gauze and irritates the skin.

Skin-Grafting on Extensive Ulcers.

Dr. H. H. GARDNER reports in the *Western Lancet* an interesting and instructive case of skin-grafting in the treatment of two extensive ulcers, the result of a burn—one covering an area of 205 square inches and the other covering 48 square inches—the surface of which was a mass of healthy granulations. The operation of grafting continued during six months, in which time 504 grafts were planted. Of this number 230 were saved. During one month seventy-nine square inches of the surface were covered with permanent tissue. The details of the case as reported, are very instructive, and from a careful study of them Dr. Gardner deduces the following conclusions:

The granulations should be small, conical, red and crowded together, as seen in the first stage of their growth, and after being stimulated; then the adjacent skin will generally show a white line of newly formed tissue, and running out from it a depressed edge of fine white lines on a bluish ground.

We may be sure that the condition of the granulations most favorable for skin-grafting is the best for healing, aside from such assistance.

The means for obtaining and keeping this condition of the granulations are constitutional, mechanical and local.

(a) *Constitutional*.—Any inherited or acquired constitutional defects should be treated accordingly. In extensive ulceration suddenly acquired, or smaller of long duration, a stimulating tonic treatment is indicated. Mild sedatives

are demanded when there is pain or irritation; this condition often causes a capillary hemorrhage, with loss of healthy granulation.

If a large amount of skin has been destroyed, the other organs, being overworked, all require careful watching, and any failing should be braced if possible. Attention to or neglect of constitutional details will be accurately shown by the granulating surface.

(b) *Mechanical*.—Perfect drainage is essential to the proper condition of the granulations.

Large dropsical granulations are most frequent; where from the position of the part, drainage is imperfect, there most grafts are lost.

The granulating part should be placed in a position that will give the best drainage from the edge on which the last grafts were planted.

The part should be supported e. g.: A leg bandaged from the toes to a point above the injury, and raised on pillows. Light close-fitting dressing can be made from well cleaned old linen or cotton, smeared with a cerate; then cut and adapted to fit without wrinkles. Two thicknesses with the roller will be enough.

A cerate gives more support to the granulations than any ordinary ointment or oil. Complete rest should be enjoined.

(c) *Local*.—It is accepted that irritation is necessary for new cell formation and stimulates a tissue to increased development.

Even healthy granulations require to be mildly stimulated or irritated before they are fit for grafts. Close attention is required to keep this proper condition of the granulations and avoid over-stimulation.

Many things might answer as mild irritants. Cerat. resina, either pure or

mitigated to fifty or twenty-five per cent., will generally answer better than anything else, but it cannot be constantly employed, and when causing too much irritation should be alternated with a milder cerate. Cerate. creasot. (3 ss: 5 j) answers well. When a part is not granulating or is covered with large watery granulations, touching with lunar caustic and applying basilicon for twenty-four hours does good.

In preparing a part for grafts, and as before stated, this should be the best drained, and along the upper edge smear a piece of cotton with basilicon, place it on the granulations and allow it to remain twenty-four hours. The rest of the ulcer may be dressed with a milder cerate.

The effect of antiseptics on the granulations was not ascertained. A one-per-cent. solution of carbolic acid was used in cleansing the ulcers, and the bandages were sprinkled with it thrice daily. The moisture gave great relief; the pus was always laudable and the granulations were generally in good condition.—*Med. Age*.

Radical Cure of Hernia in Childhood.

MR. PUGHE (*British Med. Jour.*) advocates the treatment of large herniæ in children by the open method, which consists of the usual operation of herniotomy with ligature of the sac at the internal ring. The sac is uncovered by an incision commencing a little above the internal ring and running down over the hernia for about three inches. The sac is next separated from the cord and freed from surrounding structures, and a ligature of chromicised cat-gut is passed round it with an aneurism needle. The contents of the hernia being now returned to the abdomen and the sac drawn down, the ligature is tied once or

twice round its neck as high up as possible. Lastly the sac must be incised and drained. The author considers it all important to firmly and securely ligature the sac at the inner ring, that is, at the part where it becomes continuous with the general cavity of the peritoneum, so as to make the peritoneal surface perfectly level over the internal opening into the canal. The depression over the internal ring is thus obliterated; and by preventing the hernia from descending into the sac and dilating the canal, the tendency towards a reformation of the hernia is entirely done away with.

Egyptian Tamarind Flowers in Piles.

Our correspondent, Dr. BROBST, at Litiz, Pa., states in a letter to us that he has found a wine-glassful, three times a day, of an infusion of the above flowers, a valuable, pleasant laxative, and very useful in hemorrhoids—quite a specific, indeed. The flowers are described in the United States Dispensatory, and recommended as a nerve tonic. He obtained the flowers from Carpenter & Co., Philadelphia, which house he names, as many of the flowers offered in the market are too old.

The Treatment of Piles by Injections.

Dr. WM. H. VEATCH, of Carthage, Ill., has had considerable experience with this method of treating piles. He gives, in the *Peoria Medical Monthly*, the following answers to a number of questions addressed to him by correspondents desiring explicit instruction regarding the operation :

I confine myself to two principal modes of examination. 1st. The knee-breast position of the patient, placed on a table two by six feet, well cushioned. My stand is taken on the left side of

the patient. Pressing the nates apart will reveal any external tumors which exist; or the finger may be introduced through the sphincter ani to explore for internal tumors. 2d. I place the patient on the table, on left side, the limbs flexed on the body, the right limb being drawn higher than the left, with the knee resting on the table; then make the examination as before.

Piles originate from a common cause; *i. e.*, obstruction of the hemorrhoidal veins, therefore they are of the same nature and may be cured by the same treatment. The ordinary hypodermic syringe of Tiemann & Co. is the one I have always used.

The management of the needle is an easy matter when your patient is in proper position and the tumors properly exposed. Use due caution in filling the syringe; see that no air is left in the barrel; insinuate the needle gently into the tumor at any point from which you can most easily reach the sack, or center of the tumor. I have sometimes thought I have had better results from depositing the remedy at the base of the tumors, but in so doing I am aware that I risk depositing the fluid in the cellular tissue beyond the hemorrhoidal tumor, or in an unobstructed vessel beyond the limits of the tumor. In such an event I can easily see how we might realize Dr. Allen's fears of embolism. The safest plan, therefore, is to pierce the tumor at its apex or centre.

I have used all strengths, from equal parts of carbolic acid and water to that of only five per cent. of acid, and have had good results from all; but as a rule I use a twenty-five per cent. solution. Patients will bear this strength as a rule without complaining. I have used tr. iodine, sol. subsulph. ferri, tr. ferri chlor., sol. plumbi acetat., sol. zinci sulph. and simple cold water; anything

that will coagulate the blood. Several of the above act more promptly in that way than carbolic acid, but my experience is in favor of the acid on account of the readiness with which absorption takes place after its use. A little alcohol thrown into the tumor after the coagulum has formed will assist absorption.

The following is the formula I employ: *R. Acidi carbolici; glycerini, āā fl ʒj.; morphinæ sulph, gr. viij.; aquæ dest., fl ʒij. M. Sig. Inject from five to ten drops into each tumor once in two weeks.*

In nervous persons, who are easily hurt, and complain of very slight causes of pain, I inject but one at a time, but frequently I inject all at once if there are half a dozen.

External tumors are always much more painful under the operation, and are much longer being absorbed. Occasionally tumors suppurate and discharge considerable quantities of pus, just as they frequently do without an operation of any kind; but these pus sacks usually granulate and heal with but little difficulty.

I give great latitude in regard to the time necessary to a cure. They have run all the way from five days to five months. A great deal depends on the length of time the tumors have existed.

When the tumor is once cured the vein at that point is obliterated and cannot fill again; but obliterating the vein at one point will not prevent a tumor from forming in any other part of the vein.

The length of time which patients suffer after treatment depends in a great degree on the condition of the tumor, the sensitiveness of the patient, and the strength of the solutions used. Ordinarily the first twelve hours puts an

end to the pain, *i. e.*, the pain consequent upon the treatment.

The finger and the eye are all the instruments necessary for an examination of any case. A two-valve speculum, a tenaculum and scissors, a camel's hair pencil and a sponge are all the instruments you will require, besides your syringe, to treat any case of true hemorrhoids.

I can now call to mind only two cases who went to bed in consequence of the treatment. Almost all say that the pain of treatment is not to be compared to the pain they have suffered during the inflammatory stage of the recently filled tumors.

These are answers to the principal questions I have been able to cull from the mass of letters I have received, and I have to regret that my space will not allow me to enter more fully into the discussion of the various topics presented by my correspondence.

Now I will say to one and all, that the disease is to be treated as all other diseases must be, by the expenditure of a good proportion of common sense, and if one does not understand it he had better keep hands off. Always remember Prof. Andrews' admonition:

"This nor any other plan is exempt from danger when practiced by ignorant men."

First, understand the nature of the parts diseased. Second, understand the disease you are attempting to cure. Third, understand the nature of the remedy you are making use of; and fourth, understand how to apply it. With these simple rules in view one can scarcely do harm.

The Exact Value of the Electrolytic Method.

When any suggested remedy has not equalled its promises it is well that

prominence should be given to the fact, that too much confidence may not be reposed in it. In the *New England Medical Monthly*, Dr. A. D. ROCKWELL says that electro-surgery, and especially electrolysis, has not equalled the brilliancy of its promise, and he thus concludes his article :

Without occupying time by the recital of illustrative cases, I would offer the following summary as indicating, as nearly as possible, the exact value of the electrolytic method in surgical diseases:

1. The success to be met with in the treatment of malignant growths in general is but trifling. The size is sometimes reduced, and the pain is almost always greatly alleviated. In the class of cases, however, termed epithelioma, when the disease does not extensively involve the subjacent tissues, and where it is easily reached, it is probable that in the majority of cases the very best results will follow thorough and persistent treatment.
2. Fibroids being dense and comparatively dry, do not readily shrink under electrolysis, and it is seldom that we can accomplish more than some slight diminution in bulk. The results following this limited influence, however, are especially valuable in the case of uterine fibroids of an intramural character where the knife cannot be used. The pressure upon the bladder and rectum is in these cases greatly lessened, or entirely dissipated, and the relief that follows is immense.
3. It is in erectile and small cystic tumors that electrolysis is most effective. In these conditions it is indeed a specific. The cure that follows is complete, and with proper care scars can be avoided.
4. The ordinary form of goitre acts somewhat capriciously under electroly-

tic treatment. Goitres that are small and soft may not only be treated effectually by the introduction of needles, but external application alone will sometimes cause them to entirely disappear. Even when they are quite large, if their density is not too great, a perfect cure may follow. Where they do not entirely disappear, they may almost invariably be reduced in size, affording in many cases marked relief from the pressure that is so distressing.

5. By this method hairs may be permanently removed. The negative pole and a weak current are to be used.

6. In many cases of urethral stricture permanent relief is afforded. A more extended experience, however, is necessary to establish its exact value.—*Med. and Surg. Reporter*.

Treatment of Wens by Ether-Injections.

A communication to the *Bulletin Générale de Thérapeutique*, by Dr. LEMOYEZ, Interne at the Hospital St.-Louis, Paris, discusses the different methods of treatment of sebaceous cysts of the face and scalp, and recommends parenchymatous injections of pure sulphuric ether. A case is reported of a man debilitated and affected with chronic alcohol-poisoning, therefore a bad subject for a surgical operation, who was relieved of a wen of five years' growth by ten hypodermic injections of ether practiced at intervals of a day or two. The result was the conversion of the tumor into a cyst with fluid contents, the evacuation of the same, and speedy destruction of the cyst-wall by inflammatory action. In the case quoted, the treatment resulted in a perfect cure in a month, without keeping the patient in bed or restricting his movements as would have been required by the ordinary operation.

The advantages claimed for this method are its simplicity, painlessness and efficiency, without exposing the patient to the risk of a surgical operation or in any way interfering with his business. The injections are made into the interior of the cyst, five or ten drops at each sitting, the needle of the hypodermic syringe being moved about so as to break up the contents as much as possible. They are discontinued when inflammation or suppuration begins.

VENEREAL DISEASES.

The Hot-water Retrojection in the Treatment of Gonorrhœa.

Dr. H. HOLBROOK CURTIS, (*Med. Record.*)

I propose, without entering upon the discussion as to the probable bacterian origin of the malady, to explain a course of treatment that I have employed for two years with very excellent results.

Endoscopic examination reveals that a current of hot water passed continuously through the urethra primarily congests and secondarily renders anæmic the mucuous membrane in the same way that a hot bath affects the fingers. It is observed also that the urethra, after being acted on for some time, will endure water of a temperature that cannot be tolerated by the hand. Taking advantage of this fact, I have arranged an apparatus by means of which one is enabled to pass several quarts of hot water through the urethral canal from the prostatic portion outward, increasing all the time the temperature of the water until the thermometer oftentimes indicates 180° to 190° F. I have repeatedly passed ten quarts of water from behind forward in this manner, continuing the retrojection for sometime after the point of toleration has been reached. This

varies much in different persons. It remains then to pass a mild astringent solution through the same catheter that has been employed for the retrojection. Preferably I use a suspension of iodoform in a glycerio-tannin solution in the following proportions: \mathcal{R} . Acidi tannici, iodoformi, \overline{aa} \mathfrak{D} ij.; glycerinæ, \mathfrak{z} j.; aquæ, \mathfrak{z} ij. Sig. Heat, shake, and inject. After the injection the catheter is withdrawn and the patient is directed to return in twelve or twenty-four hours, as the case may warrant.

In twelve cases of undoubted acute gonorrhœa the discharge has been entirely checked in three days. In two cases I have succeeded in aborting the disease by one prolonged (ten quarts) thermo-retrojection. In six cases the disease lasted six to ten days, while a case of chronic gleet that had made the round of the profession for nine months succumbed in seven days to dilatation and retrojection.

It has been noticed that cases that have been treated for some time with strong mineral injections do not respond nearly as quickly to the hot-water method. I have yet to see, however, a "fresh case" of gonorrhœa, in which no previous injection has been employed, that will not recover within a fortnight if the retrojection is properly administered.

From a careful study of more than forty cases I claim for hot retrojection:

1. The course of the disease is shortened by at least two-thirds, making the average limit of the case, viz., stoppage of the discharge, nearer one week than three.

2. The discharge immediately changes from a purulent to that of the nature of gleet, and is reduced to a very small quantity.

3. There is absence of chordee and pain in passing urine.

4. Stricture as a sequel is improbable.

5. The usual inconveniences of the disease are done away with.

A brief description of the apparatus employed is as follows: An ordinary wooden armchair is half-mooned in the front of the seat to admit a tall cuspidor. A pulley is rigged on the ceiling by means of which a tin pail with a lamp beneath is elevated. A rubber tube, provided with a stopcock and connection, leads from the pail and at any time may be fitted to an ordinary No. 8 English flexible catheter. The necessity of having a catheter with a bulbous end to prevent water passing into the bladder is purely imaginary. I would also state that an ordinary Davidson's syringe may be used, the patient giving himself the retrojection from the pail on a chair beside him; this is not as convenient, however, as the gravity apparatus. When the water is of the proper temperature, say 120° F., the catheter is vaselined and introduced to within an inch of the prostate, connected with the rubber tubing and the pail elevated to such a height that the flow is brisk. The lamp under the pail will keep the temperature of the water slowly increasing. The patient holds the catheter in position and may read the morning paper until the water becomes uncomfortably hot. The lamp is then extinguished and the retrojection proceeds at the point of toleration. After this has gone on for a sufficient time, a syringe of the *injection* formulated above is thrown in and the catheter withdrawn. If the patient is unable to come back at once give him the same prescription for urethral injection or slightly modified to suit the particular case, with directions to use it twice a day, until he can return. As an adjunct to this the only internal treatment I employ is bicarbo-

nate of soda in five-grain compressed tablets, to take ten daily.

Dilute Solution of Corrosive Sublimate.

A very dilute solution of corrosive sublimate, one grain to a pint, has been used successfully in chronic diarrhœa. Latterly a somewhat stronger solution has been tried with good results in gonorrhœa, by Dr. J. McCHESNEY (*Therapeutic Gazette*). He used an injection of one grain to six ounces. He resorts to these injections, which he gives once every four hours, after the subsidence of the acute stage. He is very confident, that if properly applied, this solution will effect a cure of the gonorrhœa within from eight to ten days after it has been resorted to.

Treatment of Chronic Urethritis and Cystitis.

Dr. GUYON lays much stress upon the constitutional treatment with cod-liver oil, arsenic, iodide of iron, the sulphides externally and internally, balsams, douches, etc., according to the diathesis. The local treatment by injections, instillations, and catheterization is also of great value. Injections are only useful when judiciously employed; although most frequently used, they often fail on this account. They are either too strong or not strong enough; they either do injury or they are not efficient. Instillations made with an olive-pointed catheter in which an opening exists at the side of the olive are more valuable. A syringe is adjusted to the other extremity of the catheter, and the instrument is gradually introduced into the urethra until it meets a slight sense of resistance, when five or six drops of the solution are thrown in; after waiting a few minutes, the instrument is introduced farther,

and, when it reaches the posterior extremity of the urethra, twenty to twenty-five drops are injected. The medication usually employed by M. Guyon is the nitrate of silver ($\frac{1}{20}$ to $\frac{1}{50}$); he also uses the sulphate of copper ($\frac{1}{10}$ to $\frac{1}{30}$). Catheterism is not to be practised early, for fear of complications, orchitis, cystitis, etc., but in obstinate cases it may be cautiously used every second day; the metallic bougies are the best for the purpose. Medicated bougies seem to be without utility. Should blennorrhagic cystitis with hemorrhages occur, it is best treated by instillations of nitrate of silver, which rapidly stop the bleeding. This treatment is also effective in chronic cystitis, which is particularly liable to be persistent and have relapses.—*Bulletin Général de Thérapeutique*.—*Med. Times*.

Santonine for Gleet.

Dr. WM. ANDERSON thus writes to the *Lancet*: In treating a patient some months ago for lumbrici, he said to me, "You have not only killed the worms, but you have cured my gleet." I may mention that the gleet had been obstinate, of long standing, and recurrent in spite of the usual remedies. He has had no return since. In 1864 I published a paper on santonine, but although I then made some experiments showing its effects upon the urine, it never occurred to me to try it in gleet or gonorrhœa. The formula I recommend is: Santonine, sacchari lactis, āā gr. v.; tere bene et ft. pulv. To be taken twice a day, fasting, in milk.—*Med. and Surg. Reporter*.

The Treatment of Organic Stricture of the Urethra by Electrolysis.

Dr. W. H. DUKEMAN (*Med. Record*): The decomposition of fibrous tissues by

the therapeutic agent electricity—the galvanic or constant current—is no longer a disputed fact.

In our text-books on electricity we find many given experiments for the decomposition of various substances by this agent. But we fail to find anything of a simple experiment, by which any reference is made to demonstrate the utility of electrolysis in the treatment of organic stricture of the urethra, although much is said in favor of electrolysis in the successful treatment of morbid growths, tumors, chronic inflammations, etc.

In this article I desire and will attempt, to demonstrate the principle of electrolysis on animal tissues, and will here quote the experiment given by me. It is as follows: Take a small piece of fresh beefsteak and lay it on an insulated surface. Then with the positive electrode placed on the under surface of the beefsteak, and the negative electrode on its upper surface, where the decomposition can be watched, the conducting cords are now connected with six cells of the galvanic battery. By close observation in a few seconds the effects of the electrolysis on the tissues will be seen to take place. By continuing the experiment for a few minutes the results will be distinctly appreciable.

Now when we treat stricture of the urethra by electrolysis we have just such an action taking place on the fibrous tissues of which a stricture band is composed. Yet some of the most eminent of our profession say the treatment has failed in their hands, and denounce the operation as unsuccessful and unsatisfactory.

In my experience of twenty-eight cases, during the last two years, I have not had a single failure, and experience in operating has taught me that the fol-

lowing rules must be absolutely adhered to :

First, select a good galvanic battery which gives a steady, smooth, gentle, constant current, of the strength of from five to fifteen volts. The urethral instruments used for the absorption of the stricture are bougies, made of metal and insulated with rubber, except the point, which is a silver bulb olive-shaped.

Having selected the necessary instruments we can proceed with the operation.

The recumbent position is the best. It is more agreeable to the patient and is to be preferred. To the positive pole a sponge electrode is attached, moistened with water and placed in the patient's hand, or laid on the thigh. To the negative pole the insulated electrode bougie must be attached, and the instrument should always be inserted into the stricture before connections to the battery be made, so as to avoid any shock to the patient. The electrodes in position, connections are now made with one or two cells of the galvanic battery and gradually increased to the desired strength. It is always advisable to begin the operation with a mild current and increase one cell at a time. Mild currents in the majority of cases give the best results. The bougie must be gently guided, no force should be used, and no pain should be inflicted. The electrolysis alone is to do the work. Care must be exercised to keep the bougie in line, so that the point will not deviate and make a false passage.

The operations should be repeated at intervals of from two to four weeks, as experience has taught that too frequent operations at short intervals are unsatisfactory.

DISEASES OF THE SKIN.

Multiple Cutaneous Ulceration.

In *The American Journal of the Medical Sciences*, Dr. I. EDMONDSON ATKINSON records a case of universal interest and almost unique character, which is closely related to that rare and remarkable disease known as symmetrical gangrene.

The symptoms were briefly a papulation and vesiculation, followed by a very superficial destruction of the epidermic structures and the most external dermal tissue. This was followed more or less rapidly, by ulceration of progressive character, so that, in the highest degree, in a very short time, not only muscle, fibrous tissue, and cartilage, but even bone was destroyed. At no point was there gangrene in mass, if we exclude the secondary destruction of bone, but on the other hand, rapidly progressive and molecular gangrene. This ulceration, while showing a tendency to affect similar parts of corresponding members and regions, could hardly be termed symmetrical. The right side of the face suffered much more severely than the left, while the left upper and lower extremities were decidedly more affected than those of the right side.

The extent to which motion and sensation were impaired was indeterminate. The child lost the power of locomotion, but whether from diminished nerve influence directly, or from increasing general debility, was not evident. Certainly there was no complete paralysis. Similarly with sensation, it was difficult to determine the true condition. That there was abnormal sensation was certain, but whether there was itching or paræsthesia was a matter of doubt. There were no scratch

marks, nor was any expression of pain elicited upon handling the parts. On the other hand, there can be no doubt that the sensation of pain was blunted, as shown by insensibility to quite rough usage, and by the violence with which the child bit and rubbed her extremities, even to the production of lesions and the copious discharge of blood. This bluntness of sensation extended beyond the area of lesions, and amounted to a decided numbness. Distinct symptoms of vaso-motor disturbance were not observed; the description of the mother, however, that the extremities became dry and wrinkled, is of significance, though it must be admitted that this was not observed while the child was under treatment. The color of the child's skin would also doubtless interfere with the recognition of vaso-motor phenomena.

As causes of this remarkable condition, Dr. Atkinson was able to include mercurial intoxication, and that from ergot or other medicaments which occasionally excite gangrene or destructive ulceration in those into whose bodies such agents have been introduced.

Dr. Atkinson thinks there can be no doubt that this disease belongs to the group of affections which the late Oscar Simon first named "multiple arthritic gangrene." According to Simon, it attacks, almost exclusively, children between one and two years old, and begins with vesicles which dry into scabs. These fall off and leave a loss of substance of varying depth, in some cases even reaching to the bone. In all cases, cachexia may be recognized. He regards the process as a gangrene produced by a cachetic thrombosis. It is not unlike the forms of gangrene produced by ergot, morphia, or in the course of diabetes, typhus, or in paraplegics. The prognosis is good. The

treatment should be principally of a tonic character.

In the absence of definite knowledge of the pathogenesis of these and kindred lesions, and in view of the unmistakable vaso-motor disturbances observable in the more pronounced forms of the affection known as symmetrical gangrene of Raynaud, Dr. Atkinson thinks we can do no better than provisionally accept the theory of Weiss, according to whom the disease is a neurosis, in which the vaso-motor centre is, from whatever cause, readily thrown into a state of hypertonus; the importance of the symptom depending upon the dignity of the parts upon which the vascular spasm is developed. Contraction of the cutaneous arteries will produce a bloodless condition of the skin. By venous spasm is produced local cyanosis; and by contraction of vasodilators local active hyperæmia. Similarly, by vascular spasm of these portions of the posterior columns standing in functional relation with the skin, will be produced nutritive disturbances of the skin and epidermic structures.—*Md. Med. Jour.*

Dry Seborrhœa of the Scalp.

This affection, which is almost always accompanied by some degree of irritation of the scalp, is best treated by the following preparation: \mathcal{R} . Zinci. oxid., sulphur. præcip., aa grs. j.; ung. simpl., $\frac{3}{4}$ j. M. This ointment should be applied to the head each evening, and carefully washed off in the morning.

Dirt Simulating Ichthyosis.

Dr. C. METTENHEIMER saw an old maiden lady, aged eighty-seven years, whose foot and outer side of the thigh were covered with brown, polygonal, horny scales, from a half to one inch

in thickness, resembling the hide of an alligator, and which might well be taken for ichthyosis. They were, however, composed of nothing but old, so to speak, crystallized dirt, which, as the reporter learned, had been accumulating for twenty-five years. Warm water, assisted by a weak solution of caustic soda, brought about a cure. The scales dropped off and disclosed to view the perfectly normal integument.—*Schmidt's Jahrbucher*.—*Med. Record*.

DISEASES OF THE EYE AND EAR.

Gelatine Probes for Lachrymal Stricture.

The treatment usually employed in stricture of the lachrymal canal is open to many objections. The dilatation of the canal with the metallic or hard rubber probes is attended with more or less pain, and some patients prefer to endure the inconvenience of an obstructed duct rather than undergo the operation. When the stricture is complicated with suppurative inflammation of the sac necessitating the use of an astringent injection, the difficulties to be overcome are greatly augmented.

The successful employment of medicated gelatine pencils in gleet suggested the idea that small probes made of gelatine, with astringents or anodynes incorporated, would be a great advance in the treatment of lachrymal obstruction. Acting upon this suggestion the Western Suppository Company prepared gelatine probes about the size of a No. 6 Bowman.

Several oculists in this city have given them a trial and report that they are delighted with the result. The probes are pliable and adapt themselves to the curves of the canal with the same readiness that the soft rubber ca-

theter does to the urethra, and by slowly dissolving keep the diseased part bathed in the medication much longer and more effectually than by any other means.—*Western Med. Reporter*.

Otorrhœa, with Perforation of the Membrana Tympani.

Dr. READ J. MCKAY, of Wilmington, Del., having treated, during the past eleven years, two hundred and thirty cases of otorrhœa, or, more technically chronic otitis media with purulent discharge, presents for consideration, in *The American Journal of the Medical Sciences*, some clinical observations upon such cases with old perforations of the membrana tympani, and endeavors to show that they are not the unsatisfactory and irremediable class of aural diseases which they have been regarded, and perhaps still are, by many general practitioners as well as by the public generally. And because of the well-known dangers from caries and necrosis of the temporal bones, meningitis, cerebral abscess, and purulent infection, which sooner or later may, and often do, ensue, when they are disregarded or neglected, they should not in the future, as in the past, be permitted by physicians to pass from under their observation without any, or carelessly directed, local and medical treatment. His earlier cases were treated by various caustic applications, and they required usually several months' treatment to relieve or cure them. The later ones were treated with finely powdered boracic acid (the dry method) packed in the ears, usually filling the meati the first few visits, which generally checked the purulent discharge in a few days and only required several weeks (usually about four) to relieve or cure them.—*Med. Record*.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A Plaster Dressing Especially Adapted to Movable Fractures.

Dr. M. W. O'BRIEN, in a conversation with my friend, Prof. Dawson of Cincinnati, last summer, described to me a dressing for fractures occurring at or near the shoulder joint, in which the plaster on strips of muslin of variable lengths, was laid on and over the injured part, strip at a time, making a dressing absolutely immovable and highly satisfactory in every way. I was called to assist Dr. Judkins, of this place, in dressing a fracture of the humerus, about one inch from the shoulder joint, in a man strong and muscular, æt. 60. The man had fallen from a tree, striking on the palm of the hand, breaking the bone as above, and driving the upper end of the lower fragment forward and upward, tearing the soft parts, and almost coming through the skin below the clavicle. Owing to the severity of the injury, a simple dressing was applied, and evaporating lotions used, after the fracture had been reduced under chloroform. In a week or ten days we put the plaster dressing on, as above described: 1st. Bandaging the arm and shoulder carefully and smoothly. 2d. Cutting a bandage into short strips, one inch wide, and from four to twelve inches long. Then with the plaster made thin, and to which a small part of potas. sulph. had been added, each piece of the bandage was saturated and carefully laid on over the bandage already on the shoulder. By such means a complete mould was made of the arm and of the scapular and clavicular regions. When the plaster had set, the bandage first put on was cut up the inner side of the arm

and across the shoulder above, and the cast removed. The edges trimmed, the splint was well padded with cotton, re-applied to the shoulder and retained by a roller. I am well pleased with the dressing and the result in this case. The parts were held firmly, quietly and immovably, the dressing was cool, did not cut or bind at any point, a fault so common in all other dressings for fractures in this region. It could be removed and re-applied with ease, and without moving the arm in any degree. In cases of injury at the shoulder it seems to me this form of dressing has marked advantages over any other dressing that can be applied. And for immediate application it would not be open to the objections urged against the plaster dressing applied by the simple roller. But any fracture can be dressed in the same manner, and where there are irregular surfaces, I do not think any other form of plaster will compare with it. One thing should be borne in mind: the strips being laid on one at a time, do not require to be heavily coated with plaster. Unless attention is paid to this the cast will be unpleasantly heavy. *Med. Age.*

Operation for Colotomy, with Device for Retaining Fæces.

DR. HAZZARD, (*Med. & Surg. Rep.*) This operation is reported to the medical profession not alone because it will add to the record of successful cases, but also because of the apparatus devised for retaining the alvine discharge. The inefficient methods now in use are so distressing to the patient and a source of such perplexity to the operator, as to be considerable of a barrier in deciding the advisability of an operation. The apparatus here used answers the purpose.

Case.—Mrs. N., æt. 50, married, with-

out issue. Ill health began by constipation, headache, and pains through the lower abdomen, loss of appetite, etc. Constipation increased until no solid matter passed; cathartics and injection were futile. October 15, 1881, Dr. Jos. Dickson saw the case. Digital examination of the rectum showed a nodulated stricture about the sigmoid flexure. The smallest probe would not pass the constriction, solid matter had not passed for two months, and for two weeks no matter whatever. The colon, from the sigmoid flexure to the ileo-cæcal valve, was packed with hardened fæces. There was great pain and constant tenesmus. The skin stained bronze; patient thin and weak. Morphia in gr. ij. doses was required to allay pain. She had been fed entirely upon liquid diet. The operation, as advised by Stephen Smith, was performed by Dr. Dickson without any departure being found necessary. The impacted fæces were removed gradually day by day by means of injections of warm water. The improvement was rapid. She recovered her natural color, was free from pain, and with the exception of a little suppuration in the upper border of the wound, no bad symptoms appeared. The disturbance of temperature and pulse was trivial. Treatment tonic, with an occasional $\frac{1}{8}$ grain of morphia.

In 14 days she was down stairs, in 3 weeks walked out of the house, and in 6 weeks could easily perform her household duties.

The fault of the instrument for retaining the fæcal matter is, that if not solids, then surely juices or gas will escape, and when pads of oakum, cotton, or any absorbing material, are used, they must be frequently changed, or a very unpleasant odor attends the unfortunate person. The appliance constructed by Dr. Dickson so well meets all indications,

allowing not even gas to escape, and is withal so comfortable, that he is encouraged (after three years of trial in the above case) to report it, hoping it may prove a benefit to surgeons. The most important part can be made by the surgeon himself, and the rest by any instrument-maker or harness-maker. It is made as follows.

When the wound has entirely healed a plaster cast is made of that part of the side contiguous to and over the artificial anus. When the plaster is dry make a positive cast. A piece of hard rubber three inches wide and about six inches long is to be heated in warm water, and made to conform to the shape of the cast so that the artificial opening will be at the centre of the plate of rubber. Dr. Dickson had proceeded thus far when he found that the ball of his thumb exactly filled the opening made into the gut. He carried a piece of ivory (a broken billiard ball) to the turner and had

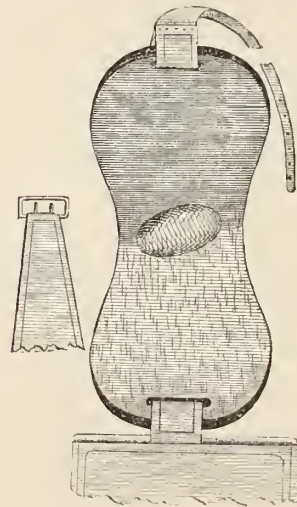


FIG. 1.

it turned the exact counterpart of the base of the thumb. This was made flat on one side, and screwed firmly to the hard rubber plate so that it would pro-

ject into the artificial anus, closing it to the exit of alvine matter, and at the same time keeping the opening patulous. A slot is then made in each end for the attachment of straps which go around the body and fasten with a buckle in front. (See cut No. 1.) The strap crossing the back is broad and padded. It was at first kept from slipping up by bandages crossing between the legs, but this was so inconvenient, besides causing irritation, that elastic ribbons were fastened at points of the appliance, and carried to a leather case around the thigh. (See Fig. 2.) The pelvic bones

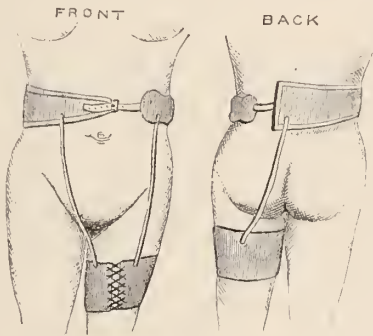


FIG. 2.

will, of course, keep it from slipping down.

The advantages of this over other methods are: 1. It dispenses entirely with the use of bougies. In this case the opening, after three years, has not contracted in the least. 2. It is cleanly, preventing the escape of solids, fluids, gas, or odor. 3. It is perfectly comfortable. 4. It is inexpensive and easily made. 5. The material of which it is made (hard rubber and ivory) are innocuous, non-irritating and not capable of absorbing and retaining discharges.

In this case the patient can easily evacuate the bowels partly by voluntary effort, partly by pressing the abdomen with her hands. She keeps a little

cloth between the pad and the skin. This has an aperture for the ivory plug. She anoints the adjacent skin with zinc ointment occasionally. This is the only care it requires, with the exception of an $\frac{1}{8}$ grain of morphia, to control the bowel when she is out of the house for any length of time, making calls or at church. Recent examination shows the lower bowel atrophied to a cord.

A New Application of Tenotomy.

The limited power of extension possessed by the ring-finger is sometimes of great inconvenience, especially to pianists. In the case of men in whom this condition was very marked Dr. FORBES recently divided the cross fibres connecting the tendon of the extensor communis for the ring-finger with those passing to the middle and little fingers. The operation was almost painless and the wound healed quickly, leaving an almost imperceptible scar. Before the operation the finger could be raised scarcely one-fourth of an inch, but after the tenotomy it could be extended one and one-fourth inch, and lost nothing of its strength in consequence.—

Wiener Med. Wochenschrift.

Primary Acute or Subacute Synovitis of the Tendons of the Hand.

Dr. RIEDELL calls attention to a hitherto apparently unobserved affection of the sheaths of the tendons in the hand, which he had seen several times, but whose true nature he recognized only after opening the sheaths. There is a painful inflammation in the neighborhood of the metacarpo-phalangeal articulation, speedily followed by a complete stiffness of the finger as far as the terminal phalanx. It never proceeds to suppuration. Dr. Riedell ascertained by an incision that the trouble

lay in every case in a swelling of the vincula tendinum, or in a fibrinous exudation into the sheath of the tendon.—*Deutsche Medicinische Wochenschrift*.

Malignant Lympho-sarcoma Treated with Arsenic.

The particulars of twenty-one cases of malignant lympho-sarcoma treated by arsenic are given in an inaugural dissertation by Dr. C. MARZOLPH, of Strassburg. Of these, six were entirely cured and two very much improved. About thirty grmm. of Fowler's solution was required to effect a cure. This result is very satisfactory, and shows, as the author claims, that arsenic acts specifically on the lymphatic glands.—*Med. & Surg. Reporter*.

Helenol.

Helenol is one of the active principles contained in the root of *Ennula campana* or *Inula helenium*, the more common name of which is elecampane.

The decoction of elecampane has been recommended as an antidartrous remedy by Knakstedt, and as antipsoric by Hufeland and Guibout. M. PAUL BLOCQ has recently made some experiments as to the antifermentative properties of helenol. [The active principles of elecampane are alantol and helenin. Helenol is probably written here for helenin.] His experiments were based upon those of Korab, which showed that this substance possessed valuable antiseptic properties. Though the experiments of M. Blocq are two few upon which to base general conclusions, yet his results have been very satisfactory in simple and recent traumatism, in wounds of inflammatory origin, in callous and indolent ulcers, in dressing amputations, and in other cases

requiring antiseptic dressings. This substance is a colorless liquid, of slightly aromatic odor. It is not irritating when used as a dressing, and its agreeable odor is a decided advantage in its favor.—*Progrès Méd.—Med. News*.

Antiseptic Dressings as they are used at the New York Hospital.

Dr. ROBERT F. WEIR, *N. Y. Med. Jour.* It will be remembered that one of the great objections brought against the use of both carbolic acid and iodoform, a still more recent antiseptic, was that they were liable to produce toxic effects, and our surgical literature is studded, and not very sparsely either, with cases in which fatal or alarming complications have occurred from this source. It was for this reason that I welcomed an antiseptic which was more potent, safer, not volatile, and easily obtained everywhere; I refer now to corrosive sublimate.

Corrosive sublimate is kept in contact with wounds in four and five different ways. Gauze, cheese-cloth, or mull, for instance, is impregnated with this antiseptic, and applied in several layers over the line of union of a wound just as the carbolic or iodoform gauze is employed. We endeavor to increase the absorbing power of this gauze by getting rid of the oily matter in it by boiling it in a weak solution of either soda or muriatic acid, then washing it again in water and drying it.

But, in order to make an equable pressure upon the tissues as well as to avoid a too frequent change of the dressing, which is apt to occur with gauze alone, materials of greater absorbing power and softness have been resorted to. In this connection peat immediately comes into one's mind. This substance, which I now show, was first employed, mixed with iodoform, at

Kiel, and it is there to-day preferred as an absorbent material, the only change in the manner of employment being that with the white peat the German surgeons at present mix some of the black sort, which is more carbonaceous, and, like charcoal, is somewhat antiseptic; one part by weight of the black peat is mixed with four of the lighter colored. I do not think that its advantages over the white are great, although Neuber places some importance upon it. One of the great advantages of the peat dressing, as pointed out by the latter surgeon, is the fact that it permits of a long period of perfect rest without disturbance by a change of the dressing. I saw patients in his wards who had worn the peat dressing without change for forty-two days. I have myself not felt disposed to leave a dressing on for so long a time as this, for I think that the tendency to septic absorption has usually passed away by the tenth to the fifteenth day, and that there is nothing to be gained by leaving the dressing on for a longer period. Another greater objection to the peat and other absorbent dressings is that they are so bulky as to prevent the easy use of splints, and, hence, in the case of compound fractures, etc.. I feel a desire to inspect the parts, to determine the position of the bones, etc., more frequently than once in two, three, or four weeks. In many other cases, however, the long-continued dressing is of great value.

All the substances are prepared for use in a very simple way. Jute and moss are dipped into a solution of corrosive sublimate, 1 part to 1,000 of water, and fifty parts of glycerin. They are steeped all night in this, then wrung out, and allowed to dry in as far as the presence of the glycerin will permit.

The gauze and cotton batting, depriv-

ed of oily matters, are immersed in a little different solution, viz.: Corrosive sublimate, 20 parts; water, 4,480 parts; glycerin, 500 parts, which is a one-quarter-per-cent. solution. A slight aniline tinge is given to the gauze to distinguish it from the unimpregnated material. These are the solutions now used in Schede and Kümmel's wards at Hamburg, being somewhat different from those I published last winter. I will only add, it is desirable to have these preparations somewhat freshly made, as often slight deterioration occurs from the change of the bichloride into calomel.

At the time of the operation a solution of corrosive sublimate—1 part to 1,000 of water (sometimes 1 to 2,000)—is allowed to trickle slowly, but nearly continuously, over the incision. It is made to run so freely at some of the clinics in Germany that the surgeon and the assistants wear not only a rubber operating coat, but also rubber shoes, in order that they shall not be swamped with the fluid. In order to protect the patient from this deluge, an ingenious device of rubber cloth is resorted to. The limb is passed through a hole in a large rubber sheet, which is tightened by a purse-string of rubber tubing, and the upper half of this sheet is then thrown back on the patient's body.

The bleeding vessels are tied, not with catgut made according to the Listerian method, but by being put in a bichloride solution—1 part to 100 of water—for ten minutes, and then in a watery solution of 1 to 1,000 for ten to fifteen hours, and afterward wound on bobbins and kept in absolute alcohol. This makes a much better ligature than when the catgut is prepared according to the formula given last year, and which was formerly used in Germany. According to that method, the catgut was kept in

a solution of sublimate in alcohol and glycerin, which made it unsatisfactory. We also sometimes make use of the ligature prepared according to the method of Kocher, of Bern—namely, first putting the catgut into the oil of juniper twenty-four hours, and afterward into absolute alcohol. Both of these kinds of catgut are great improvements on the oily catgut of Lister, not slipping, and being much easier to handle, as well as more satisfactorily antiseptic. The possibility of absorption of the corrosive sublimate solution causing toxical effects has been kept in mind, and has led some to the use of a milder antiseptic, such as that suggested by Thiersch, of Leipsic, which, consisting of boric acid, 6 parts, salicylic acid, 1 part, and water, 500 parts, is called the boro-salicylic solution. This is allowed to flow over the wound in the course of the operation, the final washing being made with the corrosive-sublimate solution. Schede, however, informed me that he had employed the corrosive sublimate solution in over a thousand cases, and had found toxical effects in only three or four instances, and then only as a stomatitis or a diarrhœa, not requiring the dressing to be abandoned. I myself have not seen, so far, any poisonous effect from the use of the sublimate solution.

All hæmorrhage having been checked and the parts cleansed, you proceed to sew up the wound, using catgut, not silk, for this purpose. If silk be used, it must have been previously impregnated with the corrosive sublimate. Instead of the ordinary interrupted suture, the continued suture is what is now employed, and, if it is necessary to recross the stitch, no disadvantage results from that fact. There must be sufficient space left to admit of an ordinary rubber drainage-tube, or that introdu-

ced by Neuber, made of decalcified tubes cut out of bone. You can make them, however, of chicken-bones, for instance, by placing such in dilute muriatic acid until only the soft part remains. In cases of amputation, or wounds where it is important to get primary union, it is desirable to use these decalcified tubes, as, in the course of four or five days, the major portion of them will have been absorbed or dissolved, making it unnecessary to remove the dressing in order to get rid of the tube, which we are obliged to do when the rubber drainage-tube is employed. One objection to the bone tube is that it often becomes absorbed too quickly; to obviate which Küster, of Berlin, keeps it in absolute alcohol before use. Having cleansed the wound carefully by squirting the sublimate solution through the drainage-tube, you place over it several sponges to firmly compress it, and then take a piece of sublimate gauze called a handkerchief technically, clap it over the center of the wound, and with it, in lieu of the sponges, make considerable pressure, and over that place half a dozen more pieces, in each instance renewing the pressure over the face of the wound. Then, over the central portion, you may apply either more of these handkerchiefs, or a compress of several thicknesses of sublimated gauze. The gauze should not be in too damp a condition, in order that, when the bandage is applied and firm pressure made, it may retain a degree of elasticity and better secure rest. In Hamburg they resort to a refinement which I do not use, because it is believed to be unnecessary—that is, they place along the line of the sutures a layer of spun glass immersed in the sublimate solution, in order to prevent possible over-action of the antiseptic, and also, because of the

capillary action of the fine glass, to cause ready absorption of the blood which may ooze forth during the first twenty-four hours. This refinement has also been abandoned in other portions of Germany. Kümmler, who employs the glass-wool in the manner just alluded to, is also accustomed to using twisted or braided glass to take the place of the drainage-tube. I do not think it possesses any advantage.

To return to the dressing: after securing your handkerchiefs over your wound by a few firm turns of sublimated gauze bandage, you apply your absorbent dressing, consisting of peat, wood-wool, or whatever it may be, done up in bags of suitable size and shape. These bags are from one to two inches thick, and tacked together in a number of places to preserve an even thickness. You may apply three or four smaller ones, adapting them about the wound, and then a larger one over these, and bind all firmly with a crinoline bandage dipped in the antiseptic solution, tucking sublimated cotton under the free edge, where needed. We do not use any impermeable substance on the outside of these dressings, as is done by Lister, as a precaution against the volatility of his carbolic acid. That is not necessary in the more permanent dressing; moreover, the pads are very thick, and the discharges do not readily reach the outer surface. There is, moreover, an objection to the impermeable outer covering, in that it not only preserves the moisture of the dressing, with which it is employed, but it also retains the perspiration which takes place in the limb, and thus acts too much as a poultice.

If you find that on the second or third day there is no elevation of temperature, you may consider that your patient is doing well. If you find a

slight staining from the discharge coming through the dressing, just douche the parts with the bichloride solution, and apply over the place an additional mass of sublimate cotton or gauze, and let matters go a day or two. In other words, we do not change the dressing until we find some decided signs that things are going wrongly. In fact, Esmarch told me that he did not consider a mere elevation of temperature of itself to indicate the need of change in the dressing. I should not be inclined to accept that view, but should consider an elevation of temperature persisting for twenty-four hours a sufficient reason for removing the dressing and searching for the cause.

On account of the action of the bichloride solution upon metals, we are still in the habit of immersing our instruments in a five-per-cent. solution of carbolic acid.

Oxide of Zinc as an Antiseptic.

The *Med. Wochenschr.* considers oxide of zinc an excellent antiseptic. It prevents the evolution of noxious organisms, sterilizes the nutritive element and retards the secretion of wounds. In superficial wounds it forms with moisture an antiseptic crust. The pus which accumulates beneath the crust is odorless. Before applying the oxide all hæmorrhage should be arrested and then it should be brought in intimate contact with every part of the wound. In deep wounds it should not be used too liberally lest the escape of pus be prevented. *Med. Med. Journ.*

Charcoal and Camphor Dressing for Wounds.

BARBOCCI (in *Raccoglitori Medico*) recommends a mixture of equal parts

of camphor and animal charcoal as a substitute for Lister dressings. The camphor acts physiologically in destroying microbes, the charcoal physically by absorbing and disinfecting the discharges. This is especially useful in old, excavated ulcers; the application removes fetidity and also relieves pain.—*Revue de Thérapeutique Méd.-Chir., Med. Times.*

Aphorisms Concerning Ligation for Arterial Hemorrhage.

Dr. J. B. ROBERTS (*Polyclinic*), holds that styptics are practically useless in general surgery, and that hemorrhage should be controlled either by pressure or ligation.

He offers the following rules: 1. In primary hemorrhage do not ligate arteries not actually bleeding, but have the patient carefully watched, for these reasons: (a) It is possible that bleeding has permanently ceased. (b) It is difficult to be sure from which arteries the bleeding came. (c) All manipulations in wounds are to be avoided unless demanded. 2. In both the primary and secondary hemorrhage the ligature should be applied, when practicable, in the wound, at the point where the artery bleeds and not above, in the continuity of the vessel. 3. If the artery is completely severed both ends should be ligated; if it is partly divided or punctured, a ligature should be applied on each side of such wound. 4. If a large artery is wounded near its origin, tie it below the wound, and tie the trunk from which it arises both above and below the point of origin of the branch. If a trunk is wounded near the origin of a large branch tie the trunk with two ligatures in the ordinary manner, and apply a third ligature to the branch. 5. When ligation of the artery in the wound is impracticable, as happens in

deep wounds of the pelvis, ligation in continuity may be permitted.

Treatment of Gunshot Wounds.

An interesting lecture is reported in the *Louisville Med. News* and the *Med. Record*, by Sir WILLIAM McCORMAC, on gun-shot wounds. Sir William says: Another thing which I think I have learned in my experience with gun-shot injuries, and one which I should like also to teach you, is to avoid unnecessary probing or to avoid probing altogether as far as you may. I see from the manner in which you receive this remark that it requires little emphasis from me, but I think it cannot be too strongly stated that the bullet, or what has become of it, is really of secondary importance in the treatment of gun-shot injuries. Usually, the first inquiry of the individual wounded is, what has become of the bullet? If it remain in the body he asks to be relieved of it, and sometimes the surgeon, in his enthusiasm, makes a very considerable effort to fulfill the patient's desire. One instrument after another is introduced until the end of the list is reached, which is a long one, for every sort of device and appliance has been invented for this purpose. I know by repeated experience how difficult it is to discriminate between a piece of lead or an exposed surface of bone, or even the edge of fascia or a tendon, and if the surgeon fails with the probe, as he often does, one forceps after another is then introduced, and the limb is almost removed piecemeal in the determined efforts to find the foreign body. Septic matter is necessarily introduced with the instruments and the surgeon's finger and thus a trivial wound may ultimately result, from septic suppurative, in the death of the patient or loss of function

of the member. Experience shows us how constantly bullets become impacted or lodged in parts of the body and remain there for years without causing any damage at all. No doubt it is not particularly desirable to have them remain if they can be easily taken away; but what I wish to insist upon is, that there is indefinitely more damage capable of being done by the injudicious efforts of the surgeon in trying to remove the bullet than would be done by the presence of half a dozen bullets. In the museum at Washington, and in all the museums, there are specimens of bullets lodged in the brain, in the lungs, in bones, &c., in some cases remaining there for years. In the museum at Washington, I saw a specimen in which a bullet, entering near the knee, passed into the cartilage of the joint, penetrating almost entirely through it into the joint. The man, at the time of the receipt of this wound, also sustained a wound of the elbow, and he told the surgeon that a bullet had gone into the knee-joint. The surgeon fortunately did not believe him and let the knee alone, and the man lived for years afterward with perfect use of the limb, and at his death the bullet was found in the position mentioned. I might multiply examples going to show that bullets are often not so damaging if left in the limb, while great damage may result from injudicious attempts to remove them.

In the Turko-Russian war the advantages of this practice received one of the strongest illustrations possible. A hospital was established in which penetrating wounds of the joints were treated simply by sealing up the wound by some antiseptic method, and by immobilizing the joint completely. I quote from memory, not having the exact statistics at hand, when I say that in twenty-one

cases of such wounds there were nineteen which recovered with the use of the limb. These were cases of undoubted penetrating wounds of the joint. If you can give such a series as that as compared with the results of former methods, by which I heard Langenbeck say that he did not believe a single case of penetrating wound of the knee joint recovered in the whole duration of the Franco-Prussian war, you can see what an amazing stride has been made in the treatment of gun-shot wounds. The distinguished surgeon, Stromeyer, states that he never probes or interferes in any way with gun-shot fractures of the joint, but does his utmost to treat such cases by rest and antiseptics, and the published results of this method of treating fractures in his hands have been infinitely better than those obtained by any other surgeon. We know how common the opinion has been to consider that gun-shot fracture of the femur necessitated amputation; and we now see on the other hand how surprisingly successful have been the results of the later method. I hope, gentlemen, that these remarks may lead you to reflect on the importance of the maxim from which Prof. Esmarch, of Kiel, preaches, which translated from the Latin, means, do not injure, do not do damage.

Just the line of conduct recommended by Sir William was followed by Dr. E. S. Moos, in his case reported in the *Louisville Med. News*, although he did not see the patient until twelve hours after the accident. We quote from the case in question: Preston T., a laborer, aged thirty-two, received an accidental gun-shot wound at 5 P. M., Aug. 19, 1882. The ball entered directly at the anterior and upper border of right axillary space, between the fourth and fifth ribs, ranged backward and down-

ward and made its exit near posterior inferior angle of scapula, between the seventh and eighth ribs.

At an examination in the afternoon it was found that blood was present in both pleural cavities, and at this time, after a consultation, it was agreed to remove the blood by aspiration on left side, but, failing in this, thoracentesis was performed between the eighth and ninth ribs, below the posterior inferior border of the scapula, and three pints of blood were taken from the pleural cavity. The cavity was washed out with a carbolized solution and closed at once. The right side was aspirated with better success, and a considerable, but not the entire amount of blood was removed. But, as the first operation had so much relieved the embarrassed respiration, we agreed to let the patient rest at this time. The case continued with little change until the third day, when local pneumonitis developed in each lung. This threatened to prove fatal up to seventh day. It was treated in the usual manner. The right side was aspirated a second time, but empyema developed in the left. On the twelfth day after the injury a second thoracentesis was performed on the same side, a drainage tube was introduced and the cavity was washed out twice a day with a carbolized solution for three weeks, when it was allowed to close. The patient recovered without deformity, but we venture to suggest that if thoracentesis had been performed on both sides with the introduction of drainage tubes, after the first operation with the associated washing, the doctor might have reported results associated with less anxiety and equally satisfactory.—*Weekly Med. Review.*

Mercuric Chloride as a Surgical Dressing.

DR. WILLIAM ROBERTSON has been using it in the strength of one-sixteenth of a grain to eight ounces of water, and in the *Brit. Med. Jour.* after detailing a case so treated, he says: The noteworthy features in the use of this salt as a surgical dressing, if future experience bears out its value, as shown in this case, are these: 1. Its facility of application. 2. Its almost costless nature. 3. Its comparative innocuousness: for we are allowed, according to the results of Koch's experiments, if these be found applicable to germs in wounds as to pathogenous germs, a much further dilution of the salt; although, in this respect, it must be considered that a slight penetration of the salt is beneficial, as it thereby tends to kill the germs that have extended more deeply into the tissues.

Since writing the above, I have had again an opportunity of trying the salt, and with equally satisfactory results.

In one case, a compound fracture of the humerus, scarcely one teaspoonful of pus has been secreted during a course of four weeks' treatment, and the fracture, in its process of repair, has closely resembled what takes place in simple fracture; there has been no odor, no pyrexia. In another instance, a case of excision of hip-joint, in the person of a boy who had suffered from morbus coxæ for four years, previously to excision sinuses existed all around the joint, discharging pus in great quantities, of bad odor. At the resection, extensive disease was found in the femur and acetabulum and removed. Now, after three weeks' treatment, the inflammatory exudation, so extensive in the tissues surrounding the necrosed bone, has very considerably diminished; the daily (twenty-four hours) discharge of pus is

reduced to about six drachms, laudable, and free from any odor. The extensive surgical wound has closed so far up, that a drainage-tube cannot be introduced. The temperature is, for the most part, normal, and the hip is free from pain. The boy sleeps remarkably well, and eats with a fair appetite. The old sinuses in this case have practically ceased discharging. The lotion here was applied, as in the other cases, on lint, and any sinuses or crevices were forcibly syringed out with it. This patient had to remain for five hours on the operating table previously to removal to bed, and had to be freely stimulated and kept warm, showing how far he had been reduced by the long course of the disease; nor does it seem that he will have to go through such a long period of recovery as it is usual in such cases, should he go on improving as the last three weeks have shown.—*Med. & Surg. Reporter.*

Treatment of Burns.

The main point to be secured in the local treatment of burns is the exclusion of the air, and this is usually accomplished by a mixture of oils, but DANIEL BRUCE writes to *New Remedies*, October, 1883, that the free use of soft soap is exceedingly satisfactory in relieving the pain, after which linseed oil may be used with wheat flour dusted upon it. When this is dried hard, repeat the oil and flour until a complete covering is obtained. Let this dry until it falls off, and a new skin will be formed without a scar. He writes from personal experience, but if he recovered *without a scar*, we imagine the burns must have been very superficial.—*Ibid.*

VENEREAL DISEASES.

Sterility in the Male.

We think there is little doubt that in infecund marriages the onus is too frequently unjustly laid on the women. It is, indeed, a very rare thing to ever interrogate the man for the cause of childlessness, the assumption almost invariably being that the woman is barren. Before the microscope, ejaculation was synonymous with virility, but the lens has exposed this fallacy, and the physician who subjects the patient and long-suffering uterus to the tortures to which it is wont to be put in cases of sterile unions, before subjecting the male fluid to an examination, does not practice medicine in a manner to reflect credit. A case in point has just been under our observation. The wife was a few years ago a picture of physical beauty—a red-cheeked brunette, and weighing about 135 lbs. The husband is a gentleman to all appearances perfectly competent, and when after two years of married life, no precautions having been taken to prevent conception, the womanly instinct craved for offspring, it was never for a moment questioned that the defect was on the side of the wife. She took medical advice, and passed from one to another, thus undergoing a variety of treatment, from the effects of which, doubtless associated with the unsatisfied longing for a child, her health became much impaired. In this condition she consulted us. An examination showed no appreciable impediment on the part of the uterus, and with her history before we declined to do anything further in the case until the husband should submit to the necessary examination. This he was all the more ready to do because of his confidence in himself. The mi-

croscope, however, revealed such a scarcity of spermatozoa and such sluggishness in the movement of the few, as to fasten beyond a question the cause of the sterile union on the man.

Gross, in his work on Male Sterility, gives an analysis of 192 cases of sterility, from which it appears that in thirty-three, or seventeen per cent., the cause was in the male. Of this number, Manningham reports one in thirty; Pajot, seven in eighty; Mondot, one in ten; Kehrer, fourteen in forty; Cousty, one in ten; Næggerath, eight in fourteen; and the author himself found the husband to be at fault once in eight cases. In the thirty-three cases reported, azoospermism existed in thirty-one, and aspermatism in two cases. The facts thus show that the husband is at fault in one case in six.—*Med. Age.*

Postponed Syphilis.

Dr. LAFFAN records in the *Lancet*, a fatal case, in which syphilitic necrosis of the frontal bone occurred in a man aged thirty-four years, seven years after he had contracted the disease, he having been comparatively free from manifestations during most of the interim. Mercury had been freely used in the early treatment.—*Ibid.*

The Co-existence of Chancre and Chancroid.

The question as to whether this is possible receives some affirmative confirmation from a case reported in the *Med. News*, by Dr. JOHN FERGUSON, of Toronto. The patient, a medical student, in whose word Dr. F. seems to have implicit confidence, had connection on the same evening with two women. Three days afterwards he had a chancroid; five weeks subsequently he had a chancre, followed by constitu-

tional syphilis, though in the meantime he had not had connection with any women. It was ascertained that one of the women was suffering from chancroids, and a man who had connection with the other woman at about the same time, subsequently had constitutional syphilis.—*Med. and Surg. Reporter.*

Turpentine in Secondary Syphilis and in Phagedenic Sores following Fever.

Deputy Inspector-General NICHOLSON (*Medical Times and Gazette*), gives some of his personal experience with "this most useful medicine" in these two classes of cases. In a dépôt hospital that fell under his charge were two patients, both of whom had had syphilis, and, after having been discharged, had returned to the hospital with syphilitic plagues—induration of the skin and of the subcutaneous tissue above and below Poupart's ligament. Both had apparently recovered under the use of iodide of potassium and rest, but both had quickly suffered a relapse. On their return they hobbled about with difficulty. They were put to bed and given iodide of potassium internally, and local compression was made by means of leaden plates and bandages. They improved apparently, and one of them soon pronounced himself, and seemed to be, quite well. However, because of his previous relapse, he was kept under treatment a while longer, and then put on light duty as a convalescent. But he soon came back in as bad a condition as ever. The former treatment was resumed, and both he and the other patient were also given turpentine, in drachm doses twice a day, made into an emulsion with liquor potassæ and water. Both were promptly cured and discharged. As neither of them returned, their cure was presumed to be permanent. Another similar pa-

tient, treated in like manner, was likewise cured, though his case had previously resisted all treatment. [Dr. Nicholson's success in syphilitic plaques led him to try turpentine in orchitis from various causes, in venereal buboes, suppurating and non-suppurating, and in other swellings, but without the slightest success.]

In West Australia, a lad of ten was attacked with a continued fever, which was apparently endemic in that region. It was mild in type and had never proved fatal. The boy, though well nourished, was not very strong constitutionally. His convalescence threatened to assume that chronic ill-health that sometimes follows typhoid fever. During its course he was unexpectedly attacked with two indolent phagedenic ashy-colored sores, one, somewhat superficial, over the right trochanter, the other, deeper on the front of the middle and upper part of the left thigh. The former exposed the tendon, and the latter laid bare more than an inch of the femur. The edges of the ulcers were swollen. Vigorous local treatment, in conjunction with the internal administration of tonics and alteratives, failed to effect a cure. Turpentine was at length resorted to, in twenty-minim doses. Improvement followed, at first quite slow and gradual, afterward more rapid and satisfactory, so that the sores seemed advancing to a speedy cure. In the absence of Dr. Nicholson for a week or so, the case was temporarily under the care of another practitioner. The latter left off the turpentine and local compression, as the patient was progressing so favorably that they did not seem to be needed. A change for the worse was the result. And, though the sore over the trochanter healed slowly when the previous treatment had been resumed, it was months before the larger one on

the thigh could be made to heal. The child never enjoyed good health again. He was pale, emaciated, with a sickly yellow look, and lame from the serious loss of flesh about the ulcer on the thigh, so that he could go about only in a perambulator. He did not long survive, though the particulars of his illness and death escaped the knowledge of Dr. Nicholson, who had changed his residence. Dr. Nicholson concludes his paper by saying: "Whether I tried turpentine in this case, as a local application, I can not now distinctly remember. If I did not, it was, I think, a regrettable omission."

Modern Circumcision.

The official circular of instructions, says the *Med. Press and Circular*, issued to the Israelitish communities of Baden, sets forth that the only persons who are to be permitted for the future to perform the rite of circumcision shall be such as shall be authorized by the Jewish Supreme Council. 1. The knife must be freshly polished and the forceps properly purified. 2. The quadrangular pillow employed, as well as the sausage-shaped ring, must be frequently renewed, and, before every circumcision, covered with new gutta-percha tissue or new sarsanet. 3. The operator, immediately before the operation, must carefully wash his hands with soap, and cleanse the nails with a good hair brush, taking peculiar care that no dirt be allowed to remain under the nails, more especially under those of the thumbs. The hands must, in addition, be washed in a five per cent. solution of carbolic acid. The operator is no longer to suck the wound, nor irrigate it with wine ejected out of the mouth. Instead of this, the blood is to be removed by gently wiping the wound with

pledgets of purified boracic lint dipped in wine. The wound is to be enclosed by being enveloped in a strip of ten per cent. boracic lint. The further removal of fluids and blood-clots is only to be effected by means of a new sponge previously soaked in a five per cent. carbolyzed solution or by salicylized lint. A medical man must be immediately called in if hæmorrhage be considerable and cannot be at once stopped, or if it be from an artery. Such authorized persons are forbidden to perform the rite, if suffering from any infectious disease, and until complete recovery has taken place.

Treatment of Infantile Syphilis.

PROF. F. N. OTIS, in an article "On Syphilis of infants and Hereditary Syphilis," in *The Aesculapian*, offers a few suggestive facts in regard to the treatment of this affection. He holds that *mercury*, in some form, must be introduced into the system of the infected infant. It is not, therefore, a question of medicine—the *agent*—we shall use, but the *form* most easily assimilated, with the least disturbance to functions of infantile life. The digestive apparatus of the infant must be respected if any method of treatment is to be curative. To avoid any possible disturbance of the stomach the mercurial agent should be introduced through the skin by *inunction*. The skin should be gently and thoroughly cleansed with castile soap and warm water every other day during the entire treatment, and this should be continued, not only as long as any manifestations of syphilis are present, but with intervals of a week every month for six months afterwards.

If mercury must be given internally to very young infants, his belief is that it should be given in doses so small that their efficacy is thus, to say the

least very questionable. In cases where there is reason to believe that the presenting difficulty is due to the result of syphilis, that is belonging to what is known as the tertiary period, the iodide of potassium alone, or in combination with mercury, should be administered in the same manner, and in doses proportioned to the age of the child.—*Med. Journal.*

Salicylic Acid for Vesical Catarrh.

DR. BOEGEHOLD, (*Deutsch. Med. Woch.*), is inclined to believe that salicylic acid is as much of a specific for rheumatic and gonorrhœal catarrh as it is for articular rheumatism. When chlorate of potash has been of no avail, he has found salicylic acid and salicylate of soda to effect a cure.—*Med. & Surg. Reporter.*

Excision of the Urethra for Stricture.

Among the various methods recommended for the cure of stricture this one has not yet been much restored to. In *Deutsch. Med. Woch.*, DR. HUESNER reports a case of stricture of many years' duration in the spongy portion of the urethra. He cut into the urethra from the scrotum, both behind and in front of the stricture and divided the stricture on a sound passed into it from behind. He then excised the stricture portion of urethra, and united the ends over a number 16 catheter (Windler's scale) which was left in for three days. After three months No 20 could be passed with ease.—*Ibid.*

DISEASES OF THE SKIN.

Medicated Gelatine in Skin Diseases.

Professor PICK, of Prague, has recently advocated a new method of

applying remedies to diseased skin. He melts in a water-bath some pure white gelatine in twice its weight of distilled water, and whilst keeping up an incessant agitation adds the quantity of medicinal substance—*e. g.*, chrysarobin, iodoform, salicylic or phenic, and pyrogallic acids, and then allows the mass to cool. For use, a proportion of this mass is melted in a little receptacle placed in boiling water, and is then applied to the diseased skin by a camel-hair brush. It presently sets and compresses the skin; but unless smeared over with a little glycerine, in the proper use of which some little experience is needed, the gelatine is apt to crack and fall off. In this way Pick has obtained good results in psoriasis by the application of a gelatine containing 10–20 per cent. of pyrogallic acid, or 10 per cent. of chrysarobin, after a thorough washing of the parts with potash soap in a warm bath. In severe cases he renews the application every two days. He has also successfully employed gelatine medicated with 5 to 10 per cent. of salicylic acid in the squamous stage of chronic eczema, and some erythematous conditions, and in pruritus. The gelatine is easily removable by washing.—*Lancet*.

Herpes of Malarial Origin.

The following are the conclusions arrived at by Drs. VERNEUIL and Merklen in a recent memoir: 1. Herpes is one of the frequent manifestations of the paludal poison. 2. The eruption may precede the onset of intermittent fever or occur during any one of the three stages of the attack. It may even show itself after the fever has been subdued by quinine. There is then no etiological correlation between herpes and fever, notwithstanding their frequent coincidence. This proposition is im-

portant, maintaining, as it does, that herpes is not a result of the high temperature, but is, like the fever itself, a result of a more general cause, *viz.*, the malarial poison. Hence we find a new class of skin diseases, the *paludides*. A Malarial herpes presents no special characteristics. Its most usual seats are the borders of the lips, the edges of the nostrils, and other parts of the face most richly supplied with nerves. 4. The black crusts, or at least the black vesicles of herpes seem to belong to the peculiar germs of malarial fever. 5. In exceptional cases, paludal herpes shows itself in the form of Zona. 6. In its most common forms, it may be preceded and accompanied by vasomotor troubles and disturbances of sensibility of the skin about it. The cause of the eruption seems to reside in a nervous lesion, perhaps in a congestion of the cutaneous nerve-branches, resulting from a localization in these nerves of the paludal poison.—*Journal de Médecine de Bruxelles*.

DISEASES OF THE EYE AND EAR.

A New Treatment for Chronic Noises in the Head (Tinnitus Aurium).

Dr. BERNARD ROTH thus writes in the *Brit. Med. Jour.*

"In my practice as an orthopædic surgeon, I have, during the last six months, found Dr. Mortimer Granville's 'precise nerve-vibration,' by means of the percuteur, most useful in relieving and curing various neuralgias of the head and back, which are frequently present in cases of lateral curvature of the spine. Holding the opinion that, in some cases, tinnitus aurium is allied to neuralgia, I was induced to try the percuteur in the following case.

"Mrs. S., aged 57, the wife of a profes-

sional man, consulted me on October 16, with the following history. She was quite well up to four and a half years ago, when she took scarlet fever, which was followed in a few months by deafness and tinnitus aurium. The patient was never free from the noises, which had become gradually worse till the day of consultation, although the deafness was much less than it used to be. The noises were now so severe that they were felt all over the head, especially at the top of the cranium; and at times the patient was driven quite distracted, and almost out of her mind. She had tried everything during these four years, without even the slightest temporary relief to her distressing symptoms, although she has been treated by leading aurists. The patient described the noises as varying in character, but generally they gave her the impression of iron filings constantly falling. I applied the blunt ivory hammer of the percuteur over the forehead, and then at the top of the head. The vibration was as once very soothing; and in about five minutes more relief was given than the patient had ever received during the whole of the four years. After waiting about ten minutes, the noises, which had not quite disappeared, became worse; but decidedly less violent than before the percuteur was tried. On applying it again, a similar relief was given. Next day, Mrs. S. reported that she was much better till late at night, when the noises became raging again. I reapplied the percuteur on and off for three-quarters of an hour, which gave even more relief than the first day. All noise did not disappear, but it was so slight that the patient described it as being 'quite a pleasant chink,' and that she would not have noticed it if she had not been thinking about it.

"On October 24, I saw the patient for the seventh and last time. She had experienced so much relief that she decided to buy a percuteur for home use, and she felt it would give her most relief late at night.

"I am aware this is still an incomplete case; but while I am waiting for the patient to report progress, I am anxious that other surgeons more specially engaged in aural practice should try this treatment in similar cases of apparently incurable tinnitus aurium, than which there is scarcely any more distressing affection."

A Cause of Blindness.

In the course of an article in the *Am. Practitioner*, Dr. E. WILLIAMS says that in endocarditis or arteritis, and in women exhausted by puerperal hemorrhage, a coagulum may drift into the main artery of the retina and cause instantaneous blindness. Recovery of sight after such accident is almost impossible.

A Point in Diagnosis of Aneurism of the Basilar Artery.

MM. HALLOPEAU and GIRAudeau relate a most interesting case in *L'Union Med.* When the head was bent forward, respiration stopped in the stage of expiration, while the pulse, after beating regularly for some seconds, became gradually slower. When the head was thrown back, respiration was immediately re-established. It was supposed that the phenomena observed were due to the pons varolii having become compressed by the aneurism when the head was flexed, whereas during extension of the neck the artery would be elongated, and so the aneurism carried out of reach of the pons.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A Contribution to the Treatment of Fracture of the Surgical Neck of the Humerus.

Dr. W. T. OPENHEIMER (*N. Y. Med. Jour.*). O. G., a strong, healthy man, aged thirty-five, was admitted to Bellevue Hospital. When brought in he was in a state of shock, but rallied promptly under stimulation, and gave the following history :

That afternoon while standing on a scaffold erected near the ceiling of the third floor of a building, for the purpose of placing a large iron wheel upon a shaft, the weight of the wheel caused the structure to give way, and he fell about forty feet, striking his arm across a wooden railing which surrounded a hatchway in one of the floors below.

An examination revealed the presence of a lacerated wound about four inches in length, occupying the central and upper portion of the axilla on the right side, communicating with the shoulder joint. There was a compound and comminuted fracture of the surgical neck of the humerus, and the short head of the biceps was torn across.

There was a general oozing of blood from the wound, but no large vessel had been injured. Two ribs were also found to be fractured on the same side. The axilla was shaved, and the wound thoroughly washed out with a solution of bichloride of mercury, one part to two thousand.

Two large rubber drainage tubes were then inserted into the bottom of the wound through two counter-openings, one on the side of the chest and the other on the inner side of the arm, below the original wound.

The original wound was then closed with a continuous suture of carbolyzed

catgut, and a thorough antiseptic dressing applied.

A strong plaster-of-Paris jacket, reaching from the hip bones to within three inches of the axilla, was then applied to the trunk, while one end of three stout bands of sheet-iron was incorporated into its different layers during the application. The first of these bands was placed at the upper margin of the jacket, the second in the middle, and the third at its lower border.

The fracture was then reduced, the arm placed in a comfortable position, and a plaster dressing applied so as to completely encircle the arm from the wrist to a point opposite the upper end of sheet-iron projecting from the side of the body-splint. Above this point the arm-splint was arranged in the form of a gutter, so as completely to cover the outer aspect and top of the shoulder.

The projecting ends of the bands of sheet-iron were now incorporated in the arm-splint by a few additional turns of the plaster roller in the following manner :

The upper one was bent around the front of the arm, three inches below the axilla, so as to hold the arm about three inches from the body at that point.

The middle one passed around the back side of the elbow joint, so as to keep the elbow about five inches from the trunk, while the lower one passed under the wrist in such a way as to keep it about two inches from the anterior superior spinous process of the ilium, and allow the hand to rest upon the groin (see cut). As soon as the dressing had hardened sufficiently, the edges of the plaster cap covering the shoulder were perforated with a number of openings, into which broad bands of muslin were fastened, and these, car-

ried through the opposite axilla and tied gave additional security to this part of the dressing.

The patient could now change his position in bed at will without assistance, without pain, and without in any degree disturbing the fracture.

The wound being at the apex of a triangle having the body and the inner aspect of the arm for its sides, and the



upper iron band for its base, the dressings could be changed at any time without displacing the fracture.

The first dressing was changed on the seventh day from the injury.

The original wound had healed throughout by first intention, and, as there had been no discharge from the drainage-tubes they were removed.

The second dressing remained on until the patient was able to get out of bed, at the end of the third week.

The whole splint was removed at the end of the fifth week, and the shoulder

supported with a simple spica bandage and sling.

The fracture was found to be firmly united without deformity, and the motions of the joint were in every way satisfactory.

I attribute the success of the case entirely to the complete immobility of the parts and the absolute rest obtained by the peculiar arrangement of the dressing.

A Case of Supposed Dislocation of the Tendon of the long Head of the Biceps Muscle.

In *The American Journal of the Medical Sciences*, Dr. J. WILLIAM WHITE records a case of this very rare form of luxation, and reviews the history of the few other cases in which this accident is supposed to have occurred. He finds that the recorded evidence of the occurrence of dislocation of the tendon of the long head of the biceps muscle may be divided into two general classes:

1. The reports of clinical cases in which certain symptoms were referred by the writers to this displacement, but in which its existence was not otherwise confirmed.

2. The reports of cases in which the tendon of the biceps was found luxated at an autopsy, or during a dissection, but in many of which no clinical history was obtainable. The study of the literature of the cases recorded leads to the conclusion that although for more than a hundred years cases of supposed luxation of the tendon of the long head of the biceps muscle have been reported or alluded to by surgical writers, yet they have been so poorly observed or so carelessly described, that they fail altogether to carry conviction, the one case (Soden's), which possesses any strong element of probability being itself open to reasonable doubt.

The symptoms in Dr. White's own

case, which led him to the conviction that there had been true traumatic luxation of the bicipital tendon, may be enumerated as follows: 1. The recognition of the bicipital groove, empty, which, if its existence be admitted, is pathognomonic. 2. Recognition of the tendon itself. 3. The inward rotation of the arm. 4. A slight depression under the tip of the acromion, a prominence of the shoulder in front, and a flattening behind. 5. Diminution in the vertical circumference of the shoulder. 6. Shortening of the arm as measured from the tip of the acromion to the external condyle. 7. Elevation of the shoulder, tilting up of the acromion, and elongation and narrowing of axilla when the arm was carried upwards. 8. The peculiar depression situated over the bicipital groove. 9. The line of ecchymosis following and strictly limited to the course of the biceps muscle. 10. A creak or "squeak," heard distinctly on carrying the elbow away from the side. 11. Flexion of the forearm on the arm was painful, the pain being sharp, lancinating, and felt at the front of the shoulder; flexion during supination was much more painful than flexion during pronation. 12. When extension of the forearm was attempted, a tense line along the edge of the biceps could be both felt and seen. 13. The pain felt over the joint was also felt along the line of the biceps as far as its insertion, and the patient still has a "drawing" sensation over that region. 14. The arm was preternaturally mobile for some time after the accident. 15. The position of the patient after the accident. 16. The character of the force producing the difficulty. The rationale of these symptoms is very fully explained.

The Treatment of Irreducible Luxations.

In an interesting article on this subject, ROSENMEYER states that in most cases of irreducible luxation of the shoulder a high degree of usefulness may be restored to the joint by the constant and prolonged use of passive movements, massage, electricity, and warm baths; but when the mobility of the false joint is very slight, when great pain is caused by pressure on the nerve, or when the muscles are commencing to atrophy, arthrotomy is to be recommended. If the dislocation is of very old standing and extensive changes have taken place in the joint-socket, then resection of the head of the humerus should be performed. In the case of the elbow-joint, the results obtainable by passive movements, subcutaneous section of muscles, tendons, adhesions, etc., are far inferior to those which follow the resection of the joint.—*Centralblatt für Chirurgie*.

Rupprecht on the Treatment of Boils and Carbuncles.

Dr. RUPPRECHT, of Hettstädt (*Deutsche Med. Wochens.*), regards feruncles, carbuncles and anthrax pustules to be all dependent on an infectious cause, and the same treatment to be suitable for all of them. In boils, he removes the little scab which always forms early on the top, and presses into the purulent cavity a little piece of cotton wool moistened with spirit of ammonia. This ought to be done six or eight times at a sitting, a fresh piece of wool being used each time, and it may be necessary to repeat the treatment on the following day. In very large boils scarification, and in carbuncles a cross incision, must precede the application of the ammonia; in anthrax the scab must be removed and the surrounding tissue scar-

ified in a radiating form. The parts should be dressed with boracic ointment after cauterising, and it generally heals without causing any disturbance. Boils in the external ear, where septic material is easily conveyed by the fingers, should be incised with a small knife and then dressed with some antiseptic which will not injure the tympanum, such as thymol, boracic acid, or iodoform.—*Lond. Med. Record.*

Chlorate of Potassium in Foul and Malignant Ulcers.

According to the *College and Clinical Record*, Professor BARTHOLOW teaches his class that chlorate of potassium, in impalpable powder, dusted on the cleansed and dried ulcer of epithelioma will cure the disease. It is also serviceable in rodent ulcer, and he considers it superior to iodoform for chancroid ulcers.—*Med. Age.*

Hypericum (St. John's Wort) for Bed Sores.

Dr. HERBERT L. SNOW recommends it in the *Brit. Med. Journal*, saying: My attention was drawn to this remedy some years ago, by the friends of a patient afflicted with bed-sores. From the slight experience of two cases, I can strongly recommend it; it appears to induce healthy granulation and a more or less rapid cure, in a manner which we should mainly look for from alcoholic or balsamic preparations—and this without any smarting from the application. The compound oil of hypericum, which alone I have used, is sold by Mr. Garrad, chemist, of Leamington; I have vainly tried to procure it in London. A recipe in my possession directs that bottles be filled half full with the flowers of the St. John's wort; olive oil is then to be added, and the bottles are to stand in sunshine for a few days, till the oil be-

comes of a deep-red color; it is then fit for use, and may be either drawn off at once, or left till required. It is merely brushed over the sore two or three times daily, with a feather.

Apparatus for Fracture of the Os Femoris.

Dr. E. MICHENER. Since the publication of my paper on this fracture in the *Reporter*, I have received so many applications for further information of my method, that I am willing not only to make that information more accessible, but now after sixty years' experience in its use, to recommend it as a superior to most of the methods usually practiced.

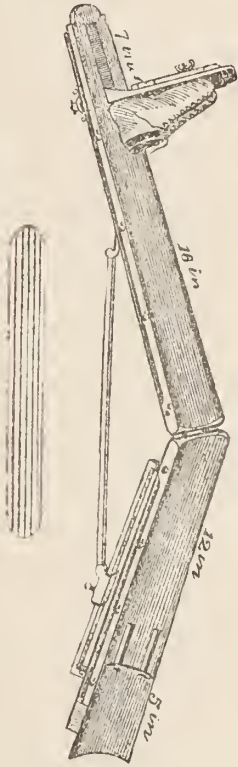
The idea was suggested, in part, by Amesbury's apparatus. The accompanying illustration is so plain as not to need much explanation of either its construction or application.

The major splint is made concave to receive the limb, then cut in two and united by hinges. These are held in position, at any desired angle, by the sliding brace and binding screw. The brass slide, secured by screw-bolts, serves to adapt it to the length of the thigh. At the foot a sliding standard is seen, carrying an adjustable laced shoe. Four brass buttons on each edge of the splint above the knee, and as many below, for the binding straps, and it is completed. These minor splints, from two to three inches wide, conveniently made by gluing narrow strips of light wood or muslin, and long enough to reach from the condyles to the top of the thigh; a bandage of strips made of strong muslin; padding for the splints; and eight pairs of straps of strong unyielding leather, with buckles, complete the outfit.

After having carefully adjusted the fracture and waited to see that no retraction takes place, remove the foot-gear, set the splint to the proper angle,

and adjust the length of the thigh-piece by the well limb, so as to press against the ischium. Apply a few folds of soft flannel for a pad, and lay down the bandage of strips, or, as I prefer to do, apply the bandage when the fracture is reduced.

If found more convenient, the limb may be laid on the splint straight, and flexed afterward. The minor splints, either padded or rolled in flannel, are next applied, and the leather straps



buckled firmly and as tight as the limb will bear. This completes the essential dressing.

My purpose is to make a permanent, strong, steady, and even pressure on the entire tissue of the thigh, and the thigh only. It effects two important ends: 1. The muscles immediately lose their natural tendency to contract, avoiding both suffering and shortening; 2.

It leaves both the hip and the knee joint free to respond to any necessary or accidental movement of the patient. The reflex motion is received by the free joints, in place of the more flexed fracture-joint. My success, I believe, has depended upon these factors in the treatment. I have never used mechanical extension, more than what the angular splint may be supposed to afford.

The foot requires little—a stocking and support in or out of the shoe, and the avoidance of under pressure on the heel.

For children, from infancy up, I have used extemporized splints made by cutting a shingle in two and nailing it on an angular block. This has always given satisfactory results.

The apparatus is equally adapted for injuries of the leg and readily admits of lateral splints when required.

Oblique Circular Amputation.

By JAMES HARDIE, M. D. ED., F. R. C. S., Eng.:

The object I have in view in this short communication is to bring under your notice a method of amputating, by which the operation may be rendered as simple and expeditious as appears possible, and the correct principles of guidance be, at the same time, fully observed.

I will take it for granted that these principles include the following: 1. Due regard to the preservation of the length of the limb. 2. Ample cutaneous covering of the bone. 3. The location of the cicatrix out of the line of pressure. 4. Due regard to the nutritive supply of the stump, and the proper coaptation of the cut surfaces.

These conditions are, to some extent, antagonistic. For example: length of limb would be best secured by two equal

sized flaps of skin only. But this would place the cicatrix directly under the end of the bone. Again, the nutrition of the stump would be best secured by including a large proportion of muscle, as in the ordinary flap-operation. But this would entail a higher division of the bone than skin-flaps, and difficulty would be experienced in accommodating the fleshy mass. To give all considerations their due weight, it would appear that a long flap of skin, with a quantity of muscle sloping from its base to a little distance from its free border, on one aspect, and a short flap of skin only, on the opposite aspect, would be the best method which could be devised. For obvious reasons, the long flap would generally be on the anterior aspect, and the short on the posterior. This is, practically, the operation Mr. Lister recommended, in his essay in Holmes's *Surgery*, for the thigh and leg. It is, of course, in these situations that full attention to the method of operating is chiefly demanded; and, though the principles are applicable to the upper extremity also, my present remarks have reference especially to the lower.

While fully agreeing, then, with Mr. Lister in the soundness of the principles which he advocates, I have yet constantly found, both in my own practice and that of others, that a certain degree of inconvenience is attached to this method of operating. In forming the posterior flap, the limb must be elevated considerably, and the surgeon has to cut somewhat awkwardly underneath it. In addition to this, considerable care has to be taken that the flaps bear a certain proportion to each other, in order that they may come together accurately. A certain amount of difficulty thus attends the operation, and it takes a somewhat longer time than one likes. Possibly, in consequence of these

disadvantages, it does not appear to find that amount of favor which it otherwise merits; and certainly, judging from the number of stumps, both of the thigh and leg, which one meets with, showing a total disregard for the position of the cicatrix, and therefore for the future comfort of the patient, one would imagine that a ready method, by which the most important detail may be secured, is still a desideratum.

These considerations have led me to introduce into my own practice a different method of carrying out the objects which I have indicated. Bearing in mind the favor which the circular operation generally receives at the hands of operators, on account of the ease and rapidity with which it may be executed, it appeared to me that it might be so modified as to attain these objects in a very complete manner. I have, therefore, been accustomed to hold the knife obliquely to the axis of the limb, in making the sweep around it, instead of transversely, as in the ordinary operation. To take the middle of the thigh as an example, I place the heel of the knife at *a*, draw it round the limb obliquely, upwards and backwards at an angle of about 55° to its axis, to *b*, where the direction changes, as it passes round the posterior aspect, to a direction obliquely downwards and forwards back again to *a*. Both at *a* and *b*, the line of incision is slightly rounded, so that *a* is convex and *b* concave. This incision goes at once down to the muscular aponeurosis; although it is convenient for the subsequent insertion of the stitches to have the skin free from fat midway between the upper and lower limits of the incision, on both the outer and inner side of the limb, as the flap has here to be folded on itself. The skin and its attached fat is next dissected back for a couple of inches at *a*, and taken in

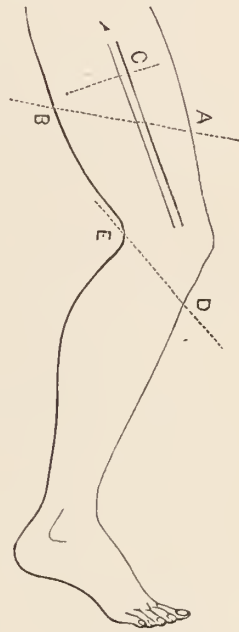
hand by an assistant, who pulls it upwards, so as to enable the surgeon similarly to separate it to a less extent all around the limb. This being done, the knife is then sunk obliquely into the anterior muscular mass, as was done by Alanson, until it reaches the bone; and the whole being well retracted, the remaining mass of muscles is totally divided in the ordinary manner by two principal strokes of the knife, the direction of which is still slightly oblique towards *b*. The bone being cleared, it is sawn at *c*, which is about an inch or an inch and a half above *b*.

As a result of this method of operating, the anterior portion of the soft parts falls well over the face of the stump and end of the bone, the convex anterior flap fitting nicely into the concave posterior, and, when healing is completed, the scar is behind the bone, and in no danger of pressure. All the advantages of the method by long anterior and short posterior flaps are also preserved, and I believe it will be found that greater facility and expedition in operating are secured.

[A patient was exhibited in whom the operation was performed at the junction of the middle and lower thirds two years previously, and who was able to walk perfectly with the weight of his body resting principally on the end of the femur].

Amputation through the knee-joint, with preservation of the patella by this method, I find to be a most excellent operation; excellent in the ease with which it is performed, and in the stump which results. In this situation, owing to the distance to which the integuments of the ham retract after their division, it is advisable to draw the incision less obliquely than in the thigh, and my rule is to begin an inch and a half below the tubercle of the tibia, and to

draw the knife round to a point about an inch below the cutaneous fold of the ham, *d e*. The skin and subcutaneous cellular tissue having been dissected up until the lower border of the patella is visible, an operation which is facilitated by flexing the knee, the ligamentum patellæ is divided, and the head of the tibia, with the semilunar cartilages, then separated by division of the other ligamentous structures. The assistant having then carefully drawn the posterior



border of the incision out of harm's way, the whole of the structures behind the joint are next divided by a single stroke of the knife, from the surface inwards. With the exception of Syme's ankle-joint amputation, I know of no operation which gives a better stump than this amputation through the knee; and I may remark, parenthetically, that I believe we should consult the prospects of recovery, and the future comfort of our patients, were we oftener to select amputation in this situation rather

than in the upper third of the leg. [Two patients were exhibited showing this amputation].

In the leg, the incision may be drawn from before backwards and upwards, as in the thigh, special care being taken to slope the knife well upwards when dividing the sural muscles. Occasionally, on account of the tendency which the skin covering the inner surface of the tibia has to slough, I have taken the covering from the outside, retaining as much as possible of the muscular tissue attached to the fibula, and dividing the bones almost at the level of the incision on the inner aspect. The former method gives the better stump should no accident befall it, but the liability to sloughing is undoubted.

Although it is to amputation in the lower limb that I look upon this operation as specially applicable, yet I have also had recourse to it in the upper. Here, probably, the covering is best taken from the posterior aspect; and, in one case of amputation through the elbow-joint, I obtained an exceptionally good result in this manner.

I have practised this operation now for over ten years, under the name "oblique circular" amputation, as a term best describing its main feature. I am bound to confess, however, what I have not long since discovered, that an operation in all essentials the same has for long been described by French writers as invented by Soupart of Liege. Though I cannot, therefore, introduce it to you as a new operation, yet I can cordially recommend it as an old one. I should have been glad, had I been able, to bring before you a greater number of persons on whom I have practised it; but, although I have only succeeded in tracing three whom I could bring to this meeting, I can frankly state that their stumps are not better

than those which may generally be obtained.—*Brit. Med. Journal*.—*Canada Lancet*.

The Treatment of Fæcal Fistula of Inflammatory Origin.

Dr. B. RIEDEL has lately recorded (*Centralbl. für Chir.*), two cases of fæcal fistula of inflammatory origin treated with success by operation. Fæcal fistula of such origin, being of much less frequent occurrence than fistula resulting from strangulated hernia, has not, he points out, engaged the attention of surgeons so much as the latter variety. Dr. Riedel states that in neither of his cases could the starting-point of the lesion be clearly made out. As there was no indication of previous intestinal disturbance, it cannot be assumed to have been typhlitis. Although the view of a glandular origin might be opposed by the fact that no lesion was observed on the lower limbs or on the genitals, still Dr. Riedel is disposed to think that the abscesses in these two cases, as in many instances of acute psoas abscess, really started in suppuration of some pelvic glands; and it is suggested that this glandular mischief may have been started by abrasion or fissure of the mucous membrane of the anus. Such pelvic abscess may burst at an early date into the gut and the pus be discharged by the rectum, whilst the passage of fæcal matter into the cavity of the abscess may be prevented by a valvular disposition of the margins of the intestinal opening. In the first case, the fistula had at one time remained closed for two years, although during this period there remained a large opening in the wall of the intestine. This opening must during this time have been hermetically closed by the firmly applied superjacent skin. In dealing with the fæcal fistula of inflammatory

origin Dr. Riedel exposes the seat of perforation, sets free the affected portion of intestine so as to be able to drag this to the surface, and then closes the orifice by sutures. He doubts whether the peritoneal cavity was opened in either of his two cases. No loops of smooth intestine were observed. Probably around the seat of the fistula in each case there had been formed, between the intestine and the abdominal wall, thin membranous adhesions which allowed the perforated portion of intestine to sink back into the abdomen, and yet prevented the passage of fæcal matter into this cavity. In Dr. Riedel's cases, the conditions for the success of his operative treatment were favorable, as the adhesions between the intestine and the anterior abdominal wall were of slight extent. In an instance of wide union of these structures it would be necessary to have recourse to resection of the perforated portion of intestine.

***On the Use of the Cauterizing Ecraseur Forceps in Hemorrhoids.**

The *Jour. Am. Med. Ass.*, says: The use of this instrument, which is the invention of Prof. RICHET, is very fully described by Dr. Bazy in *La France Médicale*. The instrument itself resembles in shape the curling-tongs of the hair-dresser, except that its branches are thicker, and their opposing surfaces are channeled at their free extremity for about three or four centimetres. In its use, a portion of the hemorrhoidal mass is drawn out by a tenaculum passed in deeply, and copper-wire carried through the base of the part so exposed, thus forming a solid and resisting handle with which to control portions of the tumor. This is continued by two or three more of the copper wires, according to the volume of the tumor, the

circumference of the anus being protected by moist compresses. This done, the surgeon draws upon one of the wires, producing a sort of pedicle, which he squeezes between the branches of his heated forceps until they meet. The copper-wire remains in his hand, and the hemorrhoidal mass is but a blackened band as thin as paper. This mode of destroying hemorrhoids has sometimes been given the name of *volatilization*. The same process is gone through with each of the other wires. When finished, the anus shows alternate radii of cauterized bands between the untouched tissue. Hemorrhage is always slight, more before than after the operation, and due to the use of the tenaculum and needle. It is readily arrested by the cauterization, which follows on the use of the forceps. The next day the parts present an inflamed swollen appearance, from the tumefaction of the uncauterized portions, which are slightly painful, but may be larger than the original mass. But there is no general reaction, and the inflammation is moderate; in exceptional cases it may be controlled by moist, sedative applications. Dr. Bazy has never seen an abscess follow the use of the instrument. In from four to eight days the inflammation subsides completely. The eschar falls off leaving healthy-looking bases, and in three weeks the cure is about complete.

The cauterization destroys the vascular circle of the inferior extremity of the rectum, interrupts its continuity, separates the vascular trunks from the rest of the circulation, and favors obliteration. But the most important results obtained is through the secondary inflammation. This, which is nearly always plastic, produces an adhesive phlebitis, which obliterates the veins, and at the same time causes a peri-phlebitis, which con-

verts the parts not reached by the cautery into a fibrous tissue, in which a relapse is impossible. This tissue, however, is sufficiently extensible to allow of a proper dilatation of the anus during defecation, with sufficient tonicity to close the anal orifice completely. This occlusion has been produced in cases where, before the operation, the habitual protrusion of the hemorrhoids has relaxed the sphincter so far as to permit the easy introduction of two or three fingers.

Treatment of Fistula in Ano.

Dr. POINGT claims that any fistula amenable to treatment by the elastic ligature may be cured by simple drainage of the fistulous tract. The drainage-tube is inserted by means of a stylet passed up the tract from the external opening. At the end of two or three weeks the drainage-tube falls out, after having destroyed the superficial wall of the fistula. A granulating surface of small extent is left, which rapidly heals by cicatrization. The procedure is wholly painless, and the patient may pursue his ordinary avocations during the entire course of the treatment. The operation is never followed by any of those serious complications sometimes seen after the cutting operation.—*Le Courrier Medical*.

A Method of Hastening the Anæsthetic Action of the Ether Spray.

The ether spray is employed frequently at the Hospital St. Louis in Paris for the production of local anæsthesia. A little procedure, first indicated by Dr. LETAMENDI, of Barcelona, but not hitherto utilized in practice, is employed by Dr. Vidal to shorten the duration of the process of congelation.

It consists in making a slight prick with a needle at the point upon which the spray is directed, at the moment when the skin assumes a purplish hue, and when the ether commencing to solidify assumes an oily consistency. The little puncture made at this time excites a reflex constrictive action of the vasomotor nerves, the blood is driven from the part, and the skin becomes white. Another method of hastening the process consists in placing little wads of lint about the part, thus increasing the surface of evaporation.—*Revue Médicale*.

Suppositories in Piles.

R̄ Iodoformi, 3j.; balsam peru., 3ij.; ol. theobromæ, ceræ alb., āā 3 iss; magnes. calcin., 3j. M. Divid. in suppos. No. xij.

One of these should be introduced after each evacuation.—*Gazette Médicale*.

Excision of the Strumous Glands.

In the *Lancet*, Dr. HENRY A. LEDIARD relates some cases of strumous glands in which he operated as follows:

After exposing the gland, he teased away the surrounding connective tissue with two dissecting forceps, and passed a thread through the gland, which was then drawn in different directions until the gland was teased away without hemorrhage. Better results ensue when the glands are firm.

In such cases M. Thiersch (*Gaz. Med. de Strasbourg*) has obtained a cure by the subcutaneous injection of nitrate of silver at a short distance from the borders of the ulcer. This treatment is without effect in phagedenic ulcerations of syphilitic origin.

VENEREAL DISEASES.

Masturbation.

DR. FRANCIS A. EVANS, (*Nashville Jour. of Med. and Surg.*) Spermatorrhœa is the inevitable result of long continued onanism. Spermatorrhœa (nymphomania, if of females,) may, however, be produced from causes aside from that of masturbation; as from excessive coitus, gonorrhœa, constant lascivious thoughts, diseases of the rectum and bladder, or any cause that will excite and continue an irritation of the genital organs. It invariably results from debility of the sexual organism, and is associated with a general impairment of nutrition and of function. This impairment may be continuous, till sexual neurasthenia results.

Female masturbators generally perform the act by simply titilating the clitoris with the fingers, and not by introducing hard substances into the vagina, as some physicians claim. Those who practice masturbation are nearly always shy, avoid company, have a downcast appearance, love solitude, and have difficulty of looking persons fair in the face. Frequently, too, they are not well nourished, nervous, pale, and manifest a great lack of courage and manly resolution.

Spermatorrhœa makes its appearance in the course of two or three years after commencement of masturbation.

It manifests itself in the form of nocturnal emissions, which at first are voluntary, and occur under the influence of lascivious dreams, and are attended by the usual feelings, but at last without sensation or consciousness of the individual. Frequently the discharge will occur after micturition, or from straining at stool, or from lifting. After the habit is fully established, the emis-

sions will occur as often as twice or three times per week. Associated with this, the patient presents an appetite very variable, sometimes voracious, sallow skin, foul taste, sleeplessness, and constipated bowels.

Treatment. The first and essential factor is prohibition of the act, as well as avoidance of obscene pictures and literature. (And I might add, avoidance of charlatans and patent medicine.) And cleanliness of person, bathing, and cheerful company, deserve consideration. The pill of quinia et ferri et strychniæ proves valuable, as does also the distilled extract of hamamelis, and the tincture of phosphorus. If there be much debility the following formula has given me the most satisfactory results: R Fl. ext. damiana, $\bar{\text{z}}$.j.; tr. staphysagria, $\bar{\text{z}}$.j.; aqua ad., $\bar{\text{z}}$.iv. M. Sig. Teaspoonful four times daily.

I have found, in the treatment of this affection, that but little medicine need be used. I lately cured a young lady by performing an imaginary castration. Another case (strange to say a married woman) I cured by slightly wounding the clitoris, and keeping it sore for some weeks.

In conclusion, I will say if other sequelæ supervene, they should be promptly met, and treated on general principles.

Necessity of Exposure of Soft Chancres with Regard to Treatment.

PERCY POTTER, F. R. C. S., writes to the *Lancet* as follows: Too often one sees in the hospital practice a condition of sloughing phagedena which has extended around the corona and involved the glands, with a history of its having begun as a small sore. These cases are much worse where the prepuce is long, for the pent-up putrescent discharge finds no escape owing to the œde-

ma, and the mischief commencing as a chancre involves the opposed surfaces of mucous membrane, and sooner or later the whole glans and foreskin are one sloughing, offensive mass. Besides several others which have lately been admitted, there are now under treatment here three patients the subjects of extensive sores of the penis.

In the first case phimosis had existed one week. There was a fetid discharge from the orifice; no sore felt on an external manipulation, but a large, ragged ulcerating surface covered by a detached slough, was exposed by an incision through the prepuce; this ulceration surrounded the neck of the glans, and had invaded the tissues nearly down to the urethra. Again, in the second case we had to deal with the sore of the corona, and another at the urethral orifice: both these had the appearance of extending, and were completely hidden by a long œdematous foreskin.

The third case was characterized by sloughing phagedena of the penis and forepart of the scrotum, with brawniness of the perineum and pubic region. Here multiple incisions were made, tension relieved, and the sloughs removed. The surface of the penis was black and gangrenous. The above patients are up and about the ward, and shortly will take their discharge.

The plan advocated is simply to slit up the prepuce upon a director with a curved bistoury, without anæsthetic. The fear sometimes entertained that the recently cut surface may become specifically affected is practically groundless, so long as it is kept clean. The form of local application is second in importance to the prevention of coaptation of the opposed mucous surfaces.

As gonorrhea is so frequently concomitant with chancre, it is obvious

that this can only be diagnosed and treated with certainty by completely exposing the orifice of the urethra. The formation of *hubo* with its long lasting sinus is obviated, the local treatment of sore greatly hastened, and the prevention of cicatricial tissue between the glans and prepuce prevented by the above operation, and I think the results are superior to circumcision, because the incision is not so long in healing, and the organ is rendered by no means more unshapely than by the complete removal of the foreskin.

The object of these brief remarks is not to claim any novelty or originality in the treatment, but to enforce the importance of exposing the mischief early so that it can be treated locally with the best possible results.—*Louisville Med. News.*

Forms for Giving Mercury per Os.

1. Blue pills. The formula is too well known to need repetition here.
2. Sedillot's pills. Each pill contains gr. iss of mercurial ointment, with gr. 9-10 of castile soap, and gr. 6-13 licorice powder.
3. Bichloride of mercury. Van Swieten's formula is as follows: *℞.* Bichloride of mercury, 1 part; rectified spirits, 100 parts; pure water, 900 parts. *M.* One teaspoonful contains gr. 1-13 of corrosive sublimate.
4. Mauriac's modification of Van Swieten's liquor. *℞.* Spirits of peppermint, 4 parts; hydrarg. bichlorid., 1 part; alcohol, 95 parts; syrup of morphia, 250 parts; orange flower water, 100 parts; distilled water, 50 parts. *M.* This preparation is twice the strength of Van Swieten's.
5. Dupuytren's pills. *℞.* Hydrarg. bichlorid., gr. 1-6; ext. opii, gr. 1-3; ext. guaiac., gr. 2-3. *M.* For one pill.
6. English anti-venereal drops. *℞.* Crystalized perchloride of iron, 1 part; corrosive sublimate, 1 part;

distilled water, 1,000 parts. M. Every f 3 iij contains gr. 1-6 of corrosive sublimate. A medium dose, one teaspoonful.

DISEASES OF THE SKIN.

Three Cases of Scabies.

Clinic lecture by LEWIS A. DUHRING: Three boys of the same family, aged respectively ten, eight and six years, exhibit, in various degrees of intensity, a marked eruption, especially on the hands, arms, neck, abdomen, genitals, and buttocks. The duration of the disease has been from eight to ten weeks, and the eminent characteristic of the lesions is their multiformity. They consist of points, papules, vesicopapules, and here and there a pustule. In addition to these are excoriations and crusts. In this disease lesions soon occupy very nearly the whole surface of the body, with a predilection for certain regions as the interdigital spaces, the flexor surfaces of the arms, the penis of the male, the breasts of the female, and the buttocks. Their multiformity and distribution give the key to the diagnosis, and we have here three cases of scabies, or itch. Itching is a constant symptom, being especially annoying at night when the patient is in bed. The disease is eminently contagious, and is produced by the presence of the itch mite, called *sarcoptes scabiei*, an animal parasite. It moves between the layers of the epidermis and in the rete Malpighii, feeding upon the juices of the skin, and as it moves along it lays its eggs, and after a short time the characteristic burrow is produced. In these cases we have any number of such well-marked burrows. They vary from a line to a quarter inch in length, being often discolored by foreign matter gaining entrance or being rubbed in, and at

the end of the burrow is a point representing the seat of the mite. Scabies is comparatively rare in Philadelphia, but is more common in seaport towns. The treatment is at once simple and satisfactory, consisting in the use of some parasiticide, and among the best are the sulphur preparations. Here we will direct the following: \mathcal{R} Sulphur. præcipitat.; balsam. Peruvian., aa 3 i.; Adipis, 3 i. M. Ft. ungt. Sig.—To be well rubbed into the entire surface of the body twice daily.

A married woman, thirty-three years of age, presents on the scalp an anomalous condition in various stages of development. About two years ago, according to the statement of the patient, twenty-two bald patches suddenly made their appearance, which is evidence that the disease came on insidiously and had existed some time before it was recognized. At present there are smooth, entirely bald patches, varying in size from a dime to a silver dollar, scattered over the scalp, also some patches covered with a growth of fine whitish silky lanugo, with here and there a scant amount of short black hair, which is all that remains of the original growth. The affection as it here exists is disfiguring, but it is already on the road to recovery, and in several months or a year the hairs will probably all return in their full vigor. In some cases, however, the disease may continue five, ten, or twenty years, going through various changes, full recovery never taking place. As regards the prognosis, the older the patient the less favorable it is, and the younger the person the more favorable. It very seldom happens that the hair does not return in young persons. The prognosis should, however, always be guarded. It is a disease of the hairy system, affecting not only that of the scalp, but also that of the eyebrows and eyelashes

and other parts of the body. It is produced by faulty nutrition and insufficient nerve-force. Some authorities assert that it is of parasitic origin; but the microscope shows no specific fungus. It belongs to the same class of diseases as vitiligo (in which there is an abnormality regarding the deposit of pigment), and often follows mental strain or shock. Internal treatment alone is followed by beneficial results, and arsenic is the agent that cures the majority of cases. It is the only remedy that seems to have a positive effect. Local stimulating applications have no great value—at least until the hair begins to grow again. The arsenic may be given in the form of arsenious acid, one-fortieth to one-thirtieth of a grain at a dose, using small rather than large doses. Where the hairs are beginning to grow, we may use some stimulating local measures; and in the present case an ointment composed of equal parts of tar and cosmoline will be ordered.

A woman, seventy years of age, has a disease affecting the sole of her left foot, and it first appeared about two months ago. At present there is in the centre of the sole of the foot an irregular, palm-sized lesion, consisting of variously sized ulcers, about one-quarter of an inch deep, the surface secreting a yellowish, puriform fluid, and very painful to the touch. Outside of this large lesion are several smaller ulcers scattered about. The whole is somewhat concentric, and possesses all the characteristics of a late tubercular syphiloderm.

These lesions affecting the soles of the feet are difficult to treat, on account of the position. In the first place, the patient will be ordered to bathe the foot in hot water until all the horny epidermis comes away; then the following ointment will be applied: \mathcal{R} Hydrar-

gyri ammoniati, 3 ss.; adipis, 3 iv.; cerat. res. co., 3 iv.—*M.* Ft. ungt. Sig. —Apply on small pieces of cloth.

Internally the iodide of potassium will be administered in ten-grain doses three times daily.

A man, about forty-five years of age, has a typical acute eruption occupying one-half the body, extending in the shape of a band three inches wide from the spinal column to the umbilicus. The eruption is characterized by groups of vesicles, some smaller, some larger, the average being about the size of a split-pea. Some of the lesions are round, others elongated; some are discrete, while others have coalesced, forming small blebs. The primary lesion is a vesicle surrounded by an inflammatory areola. The color is a pinkish, reddish, bluish tint, and not a bright red.

We have here a typical case of herpes zoster, commonly known as "shingles." It cannot be confounded with any other disease. The eruption of the vesicles is usually preceded by pain or uneasiness in the part, and where there is a persistent unilateral pain this disease may be suspected. The pain varies and is often slight. The eruption is herpetic, in that there are vesicles, and that they are grouped. There is no herpes without grouping of the lesions. The eruption is now at its height, and the lesions are already becoming flattened. The contents may be serous, bloody or pustular, and in severe cases the lesions may leave scars, especially when occurring about the orbit; it may then be accompanied by loss of the eye. The disease may attack any part of the body, but it always occurs in the line of the nerves, and especially along the track of the dorso-abdominalis or dorso-pectoralis. It is generally unilateral, only in very rare cases are both sides of the body affected. As a rule, it attacks an indi-

vidual once in a lifetime. It runs an acute course in from two to four weeks ordinarily, passing off spontaneously.

The disease is due to an inflammation of the nerves, either the terminal endings or the trunks being affected. The course of the disease is little influenced by treatment. In some cases the phosphide of zinc, given in a pill form, one-fourth to one-tenth of a grain repeated every two or three hours, is of benefit. The best form of treatment, and that which affords the most relief, is with the galvanic current, the negative being passed over the lesions. Locally, powders of lycopodium and starch may be used; but among the best applications are lotions of the fluid extract of *grindelia robusta*, one drachm to the ounce or two of water, or the compound sulphide of zinc lotion, composed as follows: \mathcal{R} *Zinci sulphatis*, *potassi sulphuret.*, āā ʒi. ; *glycerin*, fʒi. ; *aquæ*, fʒiv. —*M.* *Sig.*—Apply three or four times a day.

A lotion of sulphate of zinc, about five grains to the ounce, may also be used.

A boy, five years old, of a blond complexion, presents an eruption occupying the entire scalp. It is characterized by bright-yellow, sulphur-colored crusts and the presence here and there of bald patches. The disease has existed six months, and is a typical example of pustular eczema. Occurring on the head and where there is so much crusting as here, it is liable to be confounded with *tinea favosa*, yet the points of differential diagnosis are many and plain. In the first place, the crusts are peculiar to eczema, and bear no resemblance to the characteristic cup-shaped crusts of favus; then the bald patches are covered with abundant young hairs and contain no broken-off hairs; then, again,

there is an absence of the peculiar mousey odor of favus. Besides this, the disease is extending down the sides of the face and on the back of the ears, and also involves the eyelids.

There is no reason why this disease should prove obstinate, as it is usually amenable to proper treatment, and a cure may be effected in from four to eight weeks. The treatment will first consist of local applications of olive-oil allowed to remain on over night, and in the morning washed off with hot water and soap. By this means the adherent crusts are readily and effectually removed. After the crusts are completely removed, an ointment of ammoniated mercury, twenty grains to the ounce of lard, will be applied twice a day, fifteen minutes at a time. Internally, cod-liver oil will be ordered. When we see our patient next week, there will without doubt be a change for the better.—*Med. Times.*

Eczema.

DR. A. LIVEZEY (*Med. Summary*).
I. *Eczema of the Face*.—I think I spoke of *scabby-faced* children before but did not mention my favorite "brown ointment" as a local application. I have used this for many years with satisfaction along with alteratives internally to correct the secretions, viz.: hydrarg. creta and rhubarb, syr. yellow dock, aqua calcis with syr. rhei if tendency to diarrhœa, etc. I was once beaten by an old woman, however, in one of these cases. I had industriously pursued the above course without effect for some time, when she got an *elder-stalk*, removed the outer coat, scraped off with a bit of glass the inside or *green* bark, packed it in an earthen cup, covered it with good sweet cream and simmered it for some little time, then strained it off and she had a nice green ointment of

good consistence. Anointing the parts two or three times a day for a few days the child's face cleaned up nicely and was well! I made all the capital I could out of my alterative medicines internally, assuring her that the prompt cure was largely due to it. Be this as it may I learned a lesson, nevertheless, and had great *faith* in *elder-salve* ever since that time, 1848.

I make it now with vaseline. By the way, vaseline one ounce, boracic acid one to two drachms (pulverized as fine as possible) make a very good application in these cases—though better in *inter-trigo* or chafings of infants. Sub-nitrate of bismuth is an excellent “dusting powder” for infants, but a pinch of heavy magnesia is occasionally required.

II. *Hæmorrhoids*.—Piles, like dyspepsia, seem to be a torment to American men and women. Constipation and the prolonged sitting or standing position alike favor this disease. The *remedies* are innumerable, from Dalley's salve, Trask's magnetic ointment down through a long list of applications, both liquid and otherwise. I have tried a score or more local “specifics,” and gone back to my first love, recommended to me by the late Dr. T. Fell, of New Hope, nearly forty years ago; namely, ointment iodide of lead, about one drachm to the ounce of simple cerate in summer, or vaseline in winter. The *cause* must be obviated as far as possible, though it is most frequently impossible.

Fl. ext. cascara one ounce, tr. nucis vom. one drachm, glycerine one ounce, mixed and taken in one-half teaspoonful doses, at meals for a time, then one teaspoonful at bed time, will generally obviate constipation and relieve the piles. So will five drops fluid ext. collinsonia *bis vel ter die*, or *æsculus hippocastrium*, or tr. nux alone; or better

still, with careful diet and regulated bowels, where there is fullness and congestion about the rectum in 1-10 to 1-100 gr. aloes well triturated with pulv. sacchari. Even one-fourth to one-half grain aloes triturated with *sod. bicarb.* might not be too large in some cases.

The sol. perchloride iron and glycerine equal parts to hæmorrhoidal tumors shrivel them up, or equal parts of Monsel's solution and tinct. opii, or glycerine, tr. iodine and oil cubebs, equal parts. The lauded ointments are citrine and resin ointments, equal parts; ext. belladonna and simple cerate, equal parts; all applied *bis die*, and lastly is the “Old woman Hill's” infallible salve. Get a double handful of bugle weed tops (*Lycopus Virginicus*), and half the quantity white oak bark, well bruised, cover with lark, and simmer, strain, etc. Finally comes the ordinary and the hypodermic syringe, strong injections of the iron preparations, vegetable astringents, and fl. ext. ergot can be used. The favorite with the hypodermists perhaps is carbolic acid one part, glycerine four parts—inject a few drops into the tumors.

To allay the annoying itching use any of the above, or tr. lobelia, or glycerine one ounce, carbolic acid twenty drops. Mix and apply, first cleansing the parts with soap and water. This will sometimes cure if the tumors are inconsiderable.

III. *Salt Rheum* of the hands, an herpatic affection. This is frequently seen dry, scaly, rough, cracked, red and ugly looking. Goulard's ext. subacetate lead and glycerine, equal parts; anoint the hands with a few drops twice or thrice a day will often cure—always give great relief and comfort. This should be applied immediately after the hands have been washed with castile soap and water before they are fully dry.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Exercise in the Treatment of Non-United Fractures.

These cases of non-union will often-times prove exceedingly annoying, hence the expedient which has proved entirely successful in the hands of Dr. G. W. NESBITT (*Jour. Am. Med. Ass.*), is worthy of trial.

"July 25, having first applied a close-fitting elastic stocking to the limb, as far up as six inches above the knee, I then made extension, till the fragments were brought as nearly as possible into apposition, and applied broad strips of a firm woolen blanket lengthwise of the thigh, and extending below the knee, and above the trochanter major and the tuberosity of the ischium. These strips completely surrounded the thigh, and were held in place by a roller bandage of the same material, applied firmly from the condyles of the femur to the perineum and the tuberosity of the ischium. I next applied a roller of mosquito-net, then a coat of plaster-of-Paris; and while it was yet soft, I applied strips of wire gauze, extending the whole length of the thigh, and outside of this another covering of the mosquito-net, which was again coated with plaster, wire gauze, and more netting, till a splint was formed at least half an inch in thickness, and extending the whole length of the thigh. I now reflected the ends of the longitudinal strips of blanket stuff, which was first applied to the thigh, back over the outside of the splint, and secured it by a roller bandage of the mosquito-net, extending from within half an inch of the lower border of the splint to within an inch of its upper margin, and over this applied a thin coat of plaster, which in turn was cov-

ered by a muslin roller bandage, which gave it a finished appearance and completed the dressing.

"The cushion-like margins of the splint above and below, formed by the reflection of the lining of the splint, as it were, were not only neat, but comfortable and firm, while the whole splint fitted so closely from the perineum and tuberosity of the ischium above to the condyles of the femur below as to render shortening almost impossible after the plaster became hardened.

"Extension was kept up until the splint became firmly set, when the patient was allowed to get up and go about, bearing his weight upon the broken leg without the aid of canes or crutches, except when taking a long walk—as coming down town, a distance of nearly a mile—when he used one crutch, and sometimes a cane and a crutch. But he worked about home, sawing wood and doing chores about the house, without any artificial support most of the time.

"The first few days he complained of some soreness at the point of fracture, but not sufficient to discourage him in his efforts at independent locomotion.

"He was now really self-sustaining, and I left him to take care of himself till October 6, when I removed the plaster dressing, and found that a firm bony union had taken place, with the limb in good shape, and with less than three-fourths of an inch shortening. The man has since that time been employed as a house carpenter, also in putting up wind-mills. He walks without limping, does all kinds of heavy work, and climbs a ladder with as much agility as if nothing had ever happened him."—*Med. & Surg. Reporter.*

Neuber's Deep Canalization in Amputation of the Female Breast.

Dr. ARPAD G. GERSTER (*N. Y. Med. Journal*). The essence of modern wound treatment centers in absolute rest of the wound. The efforts of progressive minds in surgery all bear the character of an unmistakable tendency toward securing such conditions in and about wounds as will suffice, without further interference, to insure primary or secondary union under the dressing applied on the operating table.

To Neuber, of Kiel, belongs the honor of having first demonstrated the possibility and entire safety of such endeavors.

Among his several important innovations, the idea of what he calls "canalization" seems to be pregnant with a great deal of vitality. It deserves extended trial in the varying conditions which the general surgeon has to deal with.

Canalization may be termed a process by which good drainage is afforded to a wound, shallow or deep, without the use of drainage-tubes. It is divided into two kinds: shallow and deep canalization.

Shallow canalization is employed for draining extensive subcutaneous cavities situated beneath large skin-flaps, such as occur after amputation of the breast or the removal of large tumors of the back. It is accomplished by the aid of a punch devised by Neuber, of Kiel, a tool very similar to the common leather punch, and differing from it only in the shape of the hole made by it, which is not circular but elliptic, and measures two thirds of a centimetre by one centimetre in diameter. In an emergency a common leather punch will do very well, as I have found in one case by experience.

The mode of applying the punch is to

cut as many holes out of the skin along the most dependent portion of the wound as will suffice to carry away easily all the secretions. If the wound be very extensive, it is well to scatter about a number of punch-holes over the entire skin-flap covering the wound. The punch makes a clean-cut orifice through the skin proper, out of which, however, small portions of subcutaneous fat are apt to protrude. These must be seized with forceps and removed with curved scissors.

The additional lesion caused by the punch is trifling, the holes granulate over readily, and, as a rule, are closed by the time the dressings are removed. Experience has taught that the drainage produced by these punch-holes is excellent.

Deep canalization is intended to afford drainage to the secretions accumulating in the recesses of a deep wound, as, for instance, in the neck or the axilla. Here the injury is not merely subcutaneous, but intermuscular planes are opened up, and the dangers of retention and supuration are far more grave than in shallow wounds, however extensive.

These deep-reaching wounds have formed, and in many cases will ever form, the true domain of the usefulness of the drainage-tube.

In the invention of Neuber's absorbable drainage-tubes an important step forward was made in the treatment of fresh wounds. These tubes are made of ox-bone, and, when decalcified and disinfected, behave in a wound exactly as catgut does—namely, in the course of from five to eight days they dissolve and become absorbed.

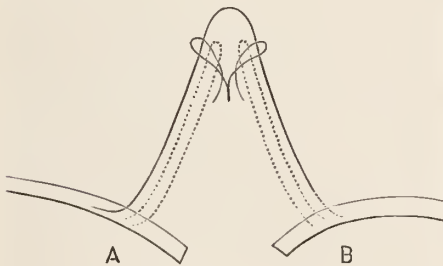
Thus the act of eliminating the drainage tube, formally requiring a removal of the dressings, goes on spontaneously without external interference.

Even an absorbable drainage-tube,

however, is at best a necessary evil, and every safe simplification of the operating apparatus must be looked upon as true progress. Neuber's inventive head has again furnished a solution to the question: "Is drainage of deep subfacial wounds possible without the use of tubes?"

He advises, in suitable cases, to detach the skin on both sides of a deep wound so as to make it movable, then to turn it into the bottom of the cavity and fasten it there with a sufficient number of catgut sutures. In this manner the greatest portion of the cavity becomes lined with skin, and it can heal by adhesion, the funnel of cutis serving at the same time as an unobstructible channel for draining the bottom of the cavity. This is called *deep canalization*.

The results attained in Professor Es-march's clinic in amputation of the female breast can hardly be surpassed. Over forty cases were treated with ab-



sorbable drainage tubes, and healed throughout by first intention. Yet it has seemed to me that I should be justified in attempting to reach the same result in a simpler manner by utilizing Neuber's idea of deep canalization. It is an accepted fact that, together with the breast, the contents of the axillary cavity ought to be invariably removed in cancer to diminish the possibility of relapse. This important addition to the operation is most easily accomplished by adhering to Professor Volkmann's

directions. He advises to incise the skin and fascia parallel to the edge of the latissimus dorsi, then to expose this muscle, to lay the knife aside, and to proceed by blunt dissection with a pair of curved scissors until the axillary vein is exposed. Having done this, the greatest danger of the operation—that is, injury to this vein—can be readily avoided, and removal of the axillary fat and the inclosed lymphatic glands in one mass becomes a comparatively easy task.

The creating of so large a cavity as the preceding step will necessitate has one great drawback. If suppuration be not avoided, a large mass of granulation, hence cicatricial tissue, will necessarily be produced, which, being in very close relation to the vein and brachial plexus, is apt to cause œdema of the arm, together with acute neuralgic pains radiating along the extremity. Furthermore, a massive cicatrix will mechanically impede abduction of the arm for a very long time.

Therefore it is obvious that to prevent the formation of a massive cicatrix in the axillary cavity must have many practical advantages, and that the object is worthy of the surgeon's best attention.

The use of the absorbable bone drainage-tube will accomplish all that is desired; but as yet the procuring of this commodity is well-nigh impossible to the general practitioner, and, therefore, I have thought it admissible to try Neuber's idea of deep canalization as adapted to the axillary cavity. The procedure is easy and simple, and does not necessitate the use of special instruments. The requisites besides the ordinary apparatus are a punch and some stout catgut.

The experiment did not necessitate any additional risk to the patient, and was accordingly made in three successive cases.

Principles which Should Govern in the Treatment of Injured Limbs.

W. W. DAWSON, M. D. In the light of present experience the injury must be great if a *primary* amputation is justifiable. *Secondary* amputations yield results equal almost, if not quite, to primary ones. This being the case, you are justified in making an effort to save the limb. Amputation should be resorted to : 1. Where the soft parts are so devitalized that restoration may not be expected, as in railroad injuries or severe gunshot wounds. 2. Where the main artery supplying the limb is divided and the soft parts are badly injured. This rule does not apply in mere division of the artery; for then it may be ligated at both ends and the limb saved, if the soft parts are not greatly damaged. The division of a large vein or nerve does not place the limb in jeopardy, as some authorities suggest. 3. The mere exposure of a large joint does not justify amputation. It is called for only when the injury to the joint is associated with a devitalized condition of the associated tissues. 4. No amount of comminution of bone alone should lead to the sacrifice of a limb; for by the move-immovable dressing the parts can be so securely held in position, can be kept so quiet, that repair may always be expected. 5. When amputation is demanded, Esmarch's bandage should always be used. It economizes blood, and hence prevents shock. If the operation must be made immediately, the elastic apparatus, by saving blood, prevents the increase of the shock.

By the Bavarian dressing we can give such rest and support that we can preserve limbs that with the ordinary appliances would be lost. With it we are justified in making an effort to save a limb, that with splints would be regarded as reckless.

The whole question may turn upon the mortality following the secondary and primary amputations, and the ability of the closely-fitting and easily-adjusted apparatus to save limbs—*badly, fearfully* injured ones—limbs that were formerly regarded as hopelessly damaged.

In my lecture I prefer the division of amputation into (1) immediate, (2) primary, (3) intermediate, (4) secondary. By the first is meant an amputation performed at once. By the second, an amputation performed within forty-eight hours after receipt of injury, before inflammation has become established. The third, or intermediate, is between this and the establishment of suppuration. The fourth, or secondary, is performed after the active symptoms have subsided. This is hardly before the end of seven days. At this time pus is freely proliferated, and tension, except where pus is confined, is at an end.

The intermediate operation is a dangerous one, for it is made in the face of a high grade of action, and should never be resorted to. Immediate operations are often unsafe; the surgeon adds to the shock of the accident the shock of the operation. He should wait for reaction, for he has forty-eight hours of safety, or, rather, he will not be prohibited by inflammation before the end of that period.

Woe unto the man who is operated upon in the intermediate period.

With positive rest and graduated but regular compression, such as we can get by the movable plaster-of-Paris dressing, we are destined to enter upon a new career, and our achievements will be marvelous as compared with the past, when the fragments were hourly disturbed, and bandages acted as cords to strangulate.—*American Practitioner.*

For Hemorrhoids.

Dr. BENJ. LEE, of Philadelphia, recommends the following (*Medical Times*): R. Pulv. rhei., $\frac{3}{4}$ iv.; pulv. aloes, $\frac{3}{4}$ iij.; pulv. myrrh., $\frac{3}{4}$ ij.; sapon. hisp., $\frac{3}{4}$ ijss.; ol. cajeput., $\frac{3}{4}$ j. The powders are to be rubbed together and the soap then worked in, afterward the oil. The well-mixed mass is kept in tight bottles. The fresher it is, the better. Three grains of this mass make an effective pill, which is non-irritating, and may be used a long while without diminishing the susceptibility of the intestines, and often with positive benefit to the hemorrhoidal affection.

The Treatment of Chronic Ulcers.

Chronic ulcers have been too frequently mentioned as the opprobrium medicorum. They may be found in almost every community, and the list of remedies which have been applied to their relief is a long one. Dr. STEWART contributes to the *Med. Chronicle* a report of several cases, detailing a plan of treatment which he has found to be successful. He lays great stress upon the necessity of improving the general condition of the patient, and iron and quinine will usually be found necessary in these cases. He applies, night and morning, a solution of Carbolic acid (one to thirty or forty) to be used with a hand-ball atomizer. The spray is to be blown strongly under the edges of the ulcer and all over its surface until it has been thoroughly cleansed. No sponge or cloth must be used upon the surface of the ulcer. A cloth oiled with an ointment of vaseline and carbolic acid is to be applied to the ulcer and then lightly bandaged. Where the edges of the ulcer are hard it may be necessary to cauterize them and to ap-

ply poultices until they are softened. The points which he particularly insists upon in the treatment of chronic ulcers are, 1st., rest to the affected part; 2d., the use of the atomizer with an antiseptic solution to stimulate and cleanse, thus avoiding breaking down of the weak granulations in dressing; 3d., when practical the use of well regulated pressure with elastic bandages; 4th., the occasional use of strong stimulants to the surface of the ulcer; 5th., such internal treatment as may be indicated; 6th., to quote from the Westminster Shorter Catechism, "perseverence therein to the end."

Treatment of Varicose Veins.

This neat and simple operation is described in a contemporary by Mr. FOLKER, who has found it very satisfactory. A small incision was made on each side of a vein; and a curved needle passing in at one incision and out at the other, carried the ligature under the vein, and was withdrawn. A flat instrument was now, in the same manner, passed in at one and out at the other incision, and threaded with one end of the ligature, which then, by its withdrawal, passed the ligature over the vein. The two ends of the ligature which now surrounded the vein, projected through one opening. This was repeated in as many places as might require it, and then the lowest one was tied first, and the ligature cut off close; firm pressure was made over it just to press out any drop of blood that might be present, and the little opening was closed with collodion. Each ligature, from below upwards, was tied in a similar way, pressing the blood out of the vein up to each ligature before tying it. The ligature used in the present case was pure silk, well carbolized; but Mr. Folker

hoped to tie some with tendon-ligatures, which would become thoroughly absorbed sooner than the silk.—*Med. & Surg. Reporter.*

Cancer of the Rectum.

Prof. TRELAT (*Rev. de Therap.*), formulates the following propositions in reference to treatment: 1. Cancers of the rectum which do not cause accidents should be left alone. 2. Cancers of the very extremity of the rectum, or of the margin of the anus, should be extirpated. 3. Accidents should be treated as they arise, but palliative measures are to be avoided. In this respect he is in accord with Prof. Verneuil, but opposed to many English surgeons. 4. When the finger can be passed beyond the cancerous mass, rectotomy should be performed, otherwise not; but a way of derivation should be made by lumbar colotomy or by forming an inguinal anus.—*Ibid.*

On the Treatment of Carbuncle by Compression.

Clinical lecture by Dr. JOHN ASH-HURST, JR. (*Phil. Med. Times*): There are some peculiarities about the ulceration of a carbuncle which have not been understood until quite recently. It had long been observed that carbuncles were apt to ulcerate at numerous distinct points, giving to the surface a sieve-like or cribriform appearance; but the anatomical explanation of this condition has only been furnished within a few years by an American surgeon, Dr. Collins Warren, of Boston. By microscopical examination of the skin of the back, where carbuncles usually occur, Dr. Warren has found little processes or tubes of fat connecting the deeper tissues with the surface; he has named these tubes the fatty columns, or

columnæ adiposæ: and it is along these columns that the pus of the carbuncle, which originates as a phlegmon of the deep cellular tissue, begins to make its way to the surface.

The old-fashioned treatment, which in my student-days we were taught should be used in every case, was to make an incision the entire length and depth of the carbuncle, this incision being crossed by another at right angles to it, and extending the entire breadth and depth. Had this mode of treatment been practised in the case before you, we should have had two incisions, one eleven inches long by three deep, and the other of the same depth and ten inches in length. You can see what an enormous wound would have been made, and how much blood would have necessarily been lost. Death even may occur from hemorrhage, for there is a recorded case in which a surgeon made the regulation incisions in the afternoon and directed the nurse to apply a poultice, saying that he would see the patient in the morning. Next morning he went to see his patient, and found that he had died from hemorrhage during the night. Then, besides this risk from bleeding, incisions increase the risk of absorption of poisonous matter, as they leave a very large raw surface. Another, though less serious, objection is that the resulting wound is a very large one, and that the time required for healing is correspondingly prolonged. In order to avoid hemorrhage, some surgeons practice subcutaneous incision; but this is an uncertain operation and presents no particular advantage.

Of course, the treatment by incision has something to be said in its favor. No course of treatment could have been in general use for so many years without being of some value. It some-

what diminishes the pain of the carbuncle, and sometimes seems to prevent its spread, but it is not always certain even that it will do this. The disadvantages of incision I consider much greater than its advantages.

There is another mode of treatment which is adopted either by itself or in connection with incision—the use of caustics. They are either employed to cause central sloughing or are applied as “caustic arrows,” like the spokes of a wheel. The use of caustics in this way was introduced by Maisonneuve for the removal of tumors, and Sir James Simpson recommended the injection of caustic solutions in a similar radiating manner. I can remember quite distinctly the case of an old man with carbuncle who was a patient in the Pennsylvania Hospital when I was a resident physician there. The usual crucial incisions had been made, causing great pain and free bleeding, and it was my duty every day to cauterize the wound with the solid stick of nitrate of silver; and I can remember how that old man used to fairly shiver with the pain at every dressing. He got well at last, but it was after many weeks of needless suffering.

The first case in which I used the pressure treatment, which I now invariably employ, was that of an old woman at the Episcopal Hospital, who had a large carbuncle, and who was so old and feeble that I thought it would be really dangerous to make incisions. Mr. O’Ferrall, an Irish surgeon, was the first to recommend this mode of treatment: he applied compression by means of a plaster made to cover the whole mass of the carbuncle, and when suppuration began he cut a central opening for the escape of pus. I have preferred to use adhesive strips laid on concentrically, just as we use

them in the treatment of swelled testicle.

We begin to apply the strips at the margin, and gradually bring them more and more inward, leaving a space at the centre to allow the slough to come out. We began treatment in this case last Wednesday a week: up to that time the carbuncle had been constantly increasing, but since then the progress, fortunately, has been the other way. The pain was immediately much relieved, so that the patient has now only an occasional darting pain, but nothing really to give him distress. The carbuncle is smaller, and is getting flatter. It now measures eight by seven and a half inches, and is not more than two and a half inches deep. The patient has not lost a drachm of blood since he came into the hospital. You can see that the pus and sloughs of cellular tissue are slowly discharging themselves, and there is so far no sign of any additional opening. We have every reason for thinking that this patient will convalesce without any further trouble. Over the centre of the carbuncle we are using a small poultice, which we will change after a time for a dressing of resin cerate or zinc ointment, as may seem desirable.

There is another mode of treatment of which I have heard, but which I am happy to say I have never seen practiced. Some surgeons have been so heroic as to excise the whole mass of the carbuncle; some surgeons, too, have excised gummatous tumors. The first can be made to disappear by simple compression, and the second will be absorbed under the use of iodide of potassium. To excise the one is as unjustifiable and as unnecessary as to excise the other.

In this case, on account of the mode of treatment which we have adopted,

the ulcer left after the separation of the sloughs will be small, and the cure will be much more rapid than it would be if we had made incisions. I do not know of any instance in which the dicta of "authority" have come down to us with more injury than in the treatment of carbuncle by incision.

Some of the Uses of Elastic Pressure.

Dr. J. S. MANNING (*Med. & Surg. Reporter*): The great value of the elastic bandage became widely known to the profession through the labors of Esmarch. By the employment of graduated pressure, he was enabled to drive the blood from an extremity to the rest of the body, thereby enabling the operator to see his work and accomplish his undertaking thoroughly. There was now no longer need of undue haste, because the vital fluid was not ebbing away, as has been the case after the ordinary methods, and the surgeon might see as well as feel in his deeper dissections.

With the assistance of the elastic bandage, operations were successfully accomplished that without it had been considered impossible.

It is with a view of extending the knowledge of the usefulness of elastic pressure as a therapeutic agent that this article is penned. If a brother physician should find anything practical herein, whereby he might relieve suffering humanity of some of the many ills that weigh it down, the object of its mission will have been fully accomplished.

The uses of elastic pressure in varicose veins, and in aneurisms and chronic ulcers, are familiar to the reading part of the profession. Of course, no one undertakes to treat these disorders without resorting to pressure as the essen-

tial element of success. A far more extended use of graduated pressure should be adopted by the profession. In all incipient inflammations, judicious pressure, wherever available, would be of much benefit. To particularize: An incipient whitlow upon one of the digits may be aborted by using a narrow bandage of elastic tape or pure rubber. Apply the bandage with moderate and equable pressure from the distal extremity till it reaches the proximal side of the seat of the whitlow. The pressure should not be sufficient to drive all the blood out of the extremity, but enough to relieve congestion and reduce swelling. Now, if stasis and necrosis of tissue have not already taken place, the inflammatory products will be absorbed and all will be well again. The principle of its action is simply that pressure produces absorption, first of inorganized products or adventitious growths; and second, of healthy tissues themselves, producing atrophy.

Again, the principles above enunciated may be employed in the treatment during the early stage of inflammations of the joints, as wrist, elbow, ankle, or knee-joints, whether these be due to traumatic causes or constitutional tendencies. Elastic pressure gives support to the walls of the vessels, exudation of lymph corpuscles ceases, so much as has already exuded is taken up, and circulation is carried on through natural channels. Of course, if stasis has occurred, a slough formed, or a pus cavity produced, pressure will become an agent of evil, instead of an angel of good, unless the pus be evacuated.

Elastic pressure has an application in an important class of cases not yet generally adopted by the profession, namely, in inflammations of the mammary gland. The text-books teach in threatened abscess of the mammary gland

that strapping with narrow strips of adhesive plaster is the proper thing to do.

If this strapping has ever been accomplished to the satisfaction of the operator, it has been outside the experience and observation of the present writer. Orthodox treatment has been painful, protracted and inefficient, and this whole business is a standing reproach to the profession. The treatment of these cases of threatened mammary abscess by means of elastic pressure may be conducted quickly, safely, pleasantly. Take a piece of rubber dam, known among dentists as cofferdam, about eight inches square, perforate the centre with a hole large enough to admit the nipple of the affected breast. Tie four tapes, one to each of the four corners of the rubber dam. Pass the nipple through the perforation, and carry the tapes around the body and over the shoulders in such manner as will press the gland equably and firmly against the ribs. This pressure, in the first place, supports the breast as in a sling, and removes the pain due to sense of weight and dragging. In the second place, superfluous blood is driven back into circulation, thereby relieving the congestion. In the third place, the lacteal secretion is forced along its natural channels, to be discharged at the natural outlet, either spontaneously or by a little coaxing with the breast-pump. This appliance in no way interferes with the use of belladonna ointment or other embrocations, and, of course, constitutional treatment would meet the indications as they arise. This same appliance to a secreting, but not inflamed gland, would cause the lacteal secretion to disappear in a few days. If the inflammation has gone on to suppuration, after evacuating the pus, the application of

elastic pressure would greatly relieve suffering and hasten convalescence.

In considering the extreme frequency of inflammations of the mammary gland, the protracted suffering to which every victim of mammary abscess is subjected, the inefficiency of all treatment heretofore recommended, any plan that would control the suffering, and restore this important gland to its functions, must be hailed with delight by every lover of his race. Certain it is, if proper care and watchfulness be exercised with the means mentioned above, no case of incipient inflammation of the mammary gland need go on to suppuration; and if suppuration have already taken place, weeks of suffering may be saved by the judicious use of elastic pressure.

It is not supposed that a tithe of the uses of elastic pressure have even been hinted at, but a few thoughts on this subject reaching so many readers through the columns of a widely-read journal may develop facts from other sources, and may redound to the good of the profession.

The Prevention and Treatment of Chilblains.

Dr. DAWSON WILLIAMS. We condense from the *British Medical Journal*, the following; I doubt whether it can be correctly said that chilblains are local congestions. With the exception of the mildest and slightest cases, if even these can be excepted, there seems to me to be something more than congestions. The classical signs of inflammation, *ruber et tumor, cum calore et dolore*, are all present; indeed, a chilblain in its first or erythematous stage presents a remarkable illustration of a simple acute dermatitis. If neglected a blain forms, and under a slight friction, gives place to a tender superficial ulcer; this ulcer

is surrounded by skin which is inflamed and tender.. It is this combination or a superficial and very vascular ulcer, with extensive underlying and surrounding inflammation of the skin, which is most characteristic of the latter stage of chilblain. The gentlest touch on the diseased finger gives pain; and the dread excited by fear of a blow or rough handling may render the sufferer so miserably nervous as to lead him to avoid games and out-door amusements. The best and quickest treatment, when a case has reached this stage, is to put the boy on the sick-list for a day or two, and apply poultices till the surrounding inflammation has gone down, when the ulcer will quickly heal under favorable conditions. Occasionally, beneath the blain, or even before it has appeared, a limited sphacelus involving the whole thickness of a true skin occurs; after this becomes detached a deep ulcer with sharply-cut edges is left, but without any marked amount of surrounding inflammation. This ulcer is less painful than the condition above referred to, and heals slowly without difficulty, though it leaves an ugly scar. It is the first or erythematous stage that is most amenable to treatment. Counter-irritants do no good. An exception might, perhaps, be made with regard to iodine, which seems to act more as an astringent, and by hardening the outer layers of the epidermis may cause some pressure on the deeper layers of the cutis. Collodion is worse than useless; after drying, or even in the process of drying, it splits and cracks in various directions, and in each crack in the collodion a crack in the skin is liable to occur. Careful packing with cotton-wool is the most trustworthy treatment. A little calamine lotion applied first, and allowed to dry, will help to allay the distressing itching.

Chilblains are especially apt to occur

when the weather is both damp and cold. As a boy, I have often gone through a fortnight's frost with no chilblains, or the very slightest; whereas, soon as the thaw has set in, my hands have at once become covered with numerous chilblains. The explanation of this is, that in a thaw the air is charged with moisture, so that it is impossible to keep either boots or gloves dry, and the bare hand must be always moist. The evaporation, which under these conditions, is always going on, must necessarily keep the temperature of the parts continuously, for extending periods, below the normal. It is a mistake to wash the hands in tepid water; and warm water is not to be recommended. To plunge the hands in hot water, and then to raise the temperature still further by the addition of fresh quantities of still hotter water, certainly allays the irritation, diminishes the size of already existing chilblains, and aids in preventing the occurrence of fresh ones. The action of "hot water" is, as its recent use as a hemostatic has proved, essentially different from the actions of "warm water." Further, I believe that hot water for washing the hands is beneficial, because they can be dried more rapidly and surely than when tepid or warm water is used. In children subject to chilblains, I should recommend woollen stocking and armlets reaching to the axilla; the use of very hot water for washing hands and feet, and rapid drying with a towel; and, finally, the exercise of the greatest care in seeing that boots and gloves are dried before use. The constitutional condition which underlies the pathology of chilblain is no doubt benefited by the use of tonic remedies, such as iron-phosphate; but not, I believe, by cod-liver oil or high feeding.

—*Louisville Med. News.*

VENEREAL DISEASES.

Locomotor Ataxia and Syphilis.

Dr. LEONARD WEBER (New York Academy of Medicine), read a paper on this subject, in which he first reviewed the general statistics and the opinions of authors concerning the possible connection between locomotor ataxia and syphilis. Dr. Weber thought it not improbable that in constitutional syphilis the irritation of the syphilitic poison might start such an inflammation as would lead to the lesions which had been found in posterior spinal sclerosis when other conditions were favorable for its development. He himself had found syphilis as an ætiological factor less often than several other conditions. The most common was rheumatism. Masturbation in early youth, and continued for some time, exerted a very baneful influence upon the nervous system in both boys and girls, and laid the foundation not only for so-called nervous affections, but for organic disease. The author had had a few cases of locomotor ataxia in the history of which masturbation in early youth was found to have been a prominent feature. Spinal tabes, from a pathological and a clinical standpoint, was rather a protean disease. So far as his own observations went, in those cases in which there was also a history of syphilis benefit was derived from anti-syphilitic treatment, and in some cases the benefit was quite marked, but there had not been a complete cure in any case. Authors, however had reported a few cases in which the symptoms entirely disappeared under antisyphilitic treatment. In cases in which a syphilitic history was present, the prognosis, so far as some degree of improvement in the systems was concerned, was usually

better than in other cases, but the therapeutic results even in such cases had fallen far short of the anticipations of the positivists.

Dr. Weber's experience with syphilis had convinced him of the importance of taking the disease early in hand, and of following up the treatment persistently for years, if the individual wished to escape the tertiary effects of the disease, and among others the baneful influence which it often had upon the cerebro-spinal system. When a syphilitic history was present in a case of tabes, mercury should not be given by the mouth but by inunction, the latter method being far more efficacious and speedy in its action. The following statistics were given, based upon his experience with syphilis: The whole number of cases treated was one hundred and thirty-four, of which number one hundred and fifteen were in men, and nineteen in women. None of them were under observation less than four years, and most of them eighteen to twenty years. The details of one case were given, the only case which he had ever seen in which there was a distinct history of syphilis occurring twice in the same individual. The last initial lesion appeared five years after the first. Of the one hundred and thirty-four patients, eighteen, or 13.5 per cent. had, up to the present time presented symptoms of specific lesions of the cerebral nervous system; eight of the eighteen, of the brain alone. Six of the eight were men, two were women. Five cases were of the brain and spinal chord combined, all in men. Five of the chord only, four in men and one in a woman. Two of the eight patients who had syphilis of the brain alone died of cerebral symptoms. The other six were still alive but not cured. Of the five with syphilitic affection of the cerebro-spinal

axis, two succumbed to the disease; three were still alive. Of the five with spinal syphilis, one, a woman, died of syphilitic paraplegia; four were living, and had been relieved after treatment.

Of tabes he had records of seventeen cases. The first case was a typical one of locomotor ataxia. There was no syphilitic history. The second was a typical case of tabes involving the brain; there was a history of venereal excess, and syphilis was suspected. In the third case there were rheumatic influences but absence of syphilis. In the fourth case there was typical tabes but absence of syphilis. In the fifth case the patient contracted syphilis after having had tabetic symptoms many years. Rheumatic influences were the most important in the ætiology. In the sixth, a typical case of tabes, there had been venereal excess; syphilis suspected: there were rheumatic influences. The seventh was an atypical case, with a history of rheumatic influences, but not of syphilis. The eighth was an atypical case, early masturbation being a presumable cause; there was no syphilis. The ninth, a typical case, ended in death from cardiac disease. The cause was early and long-continued masturbation; there were rheumatic influences, but there was no syphilis. The tenth, of the spinal type, was caused by venereal excess. There was no syphilis. The eleventh, atypical in form, was of the spinal type. There were rheumatic influences, but there was no syphilis. In the twelfth, an atypical case, there was no syphilis, but probably venereal excess. The thirteenth was a typical case of the lumbar type; syphilis played the most important, perhaps the only part. The patient improved promptly under anti-syphilitic treatment. In the fourteenth, an atypical case, there were none but rheumatic influences. In the fifteenth,

a slowly progressive case of typical lumbar type, there had been syphilis twenty years before, and venereal excess for many years; improvement followed the use of galvanism and hydropathy. The sixteenth was a typical case of tabes; there had been early masturbation, and afterward prolonged physical exertion, but no syphilis; improvement resulted from galvanism and hydropathy. The seventeenth, a typical case of tabes involving the entire cerebro-spinal system, terminated in dementia paralytica, of which the patient died. There was an undoubted history of syphilis.

The author drew the following conclusions: 1. There was not sufficient evidence to show that syphilis might be the direct cause of a typical form of locomotor ataxia, in other words, of posterior sclerosis of the cord. 2. There was proof, and plenty of it, that syphilis produced certain lesions in the chord, and its meninges surely, if not as frequently, as in the brain, that these lesions might be, and often were followed by symptoms of tabes, and that they were generally relieved by prompt and energetic specific treatment, but rarely cured. 3. Experience has shown him that the tendency of the syphilitic virus to produce lesions in the nervous centers occurred the sooner the less its course was interfered with by judicious and long-continued antisyphilitic treatment. Older cases were more apt to develop neurosis than those of recent date. 4. As shown by all observers, after syphilitic lesions of the cerebral nervous system were once established, they might often be relieved, but seldom if ever cured, by specific measures. Thus we had reasons in case of syphilis for insisting on long-continued and timely treatment for keeping accurate and judicious watch over the patient, and for attending to specific symptoms as

early as possible. 5. The inunction treatment with mercury in fresh cases of syphilis was the best means of reducing the disease to an early and harmless latency.—*N. Y. Med. Jour.*

Treatment of Syphilis.

Dr. FRANCIS A. EVANS (*St. Louis Med. Jour.*) The initial lesion, if healthy, needs but to be kept cleansed with tepid water, or water and castile soap. Of course I am speaking of local treatment. If the surface be indolent then use occasionally: \mathcal{R} Calomel, grs. xv.; lime water, fl., oz. v. Mix. If the neighboring lymphatic glands become swollen and tender, they should be fomented with flannels wrung out of hot water, and poultices of hops applied. The patient should begin to take immediately: \mathcal{R} Beberis aq., oz. j.; sarsaparilla tinct., oz. j.; syrup cascara amarga, oz. vi. M. Dose—Teaspoonful thrice daily; alternated every three days for the same period with: \mathcal{R} Stillingia tinct., fl. 3 iij.; iodide potassium, 3 iv.; syrup simplex, 5 iv. M. Sig.—Same as preceding one. Don't attempt to heal the local lesion. Keep it clean and let it heal from the inside. Soon as indolence of surface disappears, stop the black wash, and use in place: \mathcal{R} Pure carbolic acid (crys.), one part; gum camphor, two parts. M. Set aside until liquified, then add 30 grs. iodoform to an ounce of the mixture. This may be applied occasionally, and will be found a fine dressing for all ulcers and fissures of the tongue. It may be necessary to omit the iodide of potass. and substitute Fowler's sol. arsenate of sodæ. Occasionally, too, phytolacca in twenty drop doses with chionanthus in same size doses will be found highly valuable.

Great care should be bestowed on the diet, which must be wholesome and

nourishing. Proper exercise in open air must always be enjoined. A warm bath twice or three times per week, with good rubbing, will help eliminate the poison and stimulate normal secretion. Under this treatment syphilis can be cured in from one year to 18 months. It need not be impressed on the mind that a pill occasionally to move the bowels will aid the treatment, as every physician must know the value of this.

DISEASES OF THE SKIN.

Treatment of Porrigio Decalvans (Alopecia.)

M. LAILLER prohibits epilation, which is useless for him, as he does not believe in the existence of a parasite. He has the head shaved frequently, at least twice per week, and if it is the beard that is attacked, he has it shaved every day, then he directs inunctions night and morning, with the following mixtures: \mathcal{R} Balsam of fioraventi, 100 grammes; camphorated alcohol, 100 grammes; tinct. pyreteri, 100 grammes; liquid ammonia, 6 grammes. M. Or the following: \mathcal{R} Balsam of fioraventi, 100 grammes; camphorated alcohol, 100 grammes; tinct. cantharid., 25 to 30 grammes. M. These lotions are of an agreeable odor and do not soil the linen. For the beard it may be sufficient to rub in Eau de Cologne.—*Progress Medicale.*

Treatment of Vulvar Herpes with Pruritus.

Dr. BOURNONVILLE directs the parts to be sponged several times a day with the following mixture: \mathcal{R} Tannin, 15 grammes; neutral glycerine, 100 grammes; aq. destill., 200 grammes; essent. menth., v. gra. M. Leave this dry (not wiping it off), and then powder freely the genitals with potato flour. If the herpes form a wound, the parts can

be freely powdered with powdered tannin. The most obstinate forms will yield to this treatment after three or four days.—*Le Med. Pract. Progres Medicale*.—*Cin. Med. Record*.

Treatment of Hives.

The following is said to have been successfully used to arrest hives and stop their itching: \mathcal{R} Fl. ext. hyoscyamus, 3 iss.; fl. ext. juglandin, 3 ij.; oil sassafras, 3 j.; sprup, \mathfrak{z} ij. M. Sig.—One-half to one teaspoonful with impunity; repeat every ten to fifteen minutes, if necessary, till relieved. To make the cure radical I prescribe nitromuriatic acid (use the C. P. articles only), \mathfrak{z} ss, simple syrup, \mathfrak{z} viiss. One teaspoonful in one-half glass of water after meals.—*Med. Summary*.

Glycerine after Bathing.

Like the ancient Romans, D. S. TROY, of Montgomery, Ala. (*Popular Science News*), has taken to using glycerine after bathing, with most happy results. He puts one drop of attar of roses in two ounces of glycerine, and rubs the body after bathing. The result was charming: it left the skin soft, with all of its functions in as full operation as before the bathing, and with a delicious sensation of perfect cleanliness. He has been using it for four or five years regularly, leading a life more sedentary than ever, and it seems to supply to the skin a vigor similar to that resulting from muscular exercise. It has been of great benefit to his general health and personal comfort. No care is required in rubbing it on, except to see that it is applied to all the skin except the face, and particularly to the soles of the feet. If any remains after the rubbing, it can be readily wiped off with a towel.

A case of Symmetrical Vitiligo

Is reported by Dr. A. H. OHMANN-DUMENSIL. The white spots were two in number, one on each side of the chin, almost the size and shape of a dime; the beard growing from them was perfectly white. Although the immediate cause of the affection is an absence of pigment cells, it was supposed that in this case a nervous influence might play a part, from the fact that the spots were symmetrical, and also from their shape. These reasons seemed to warrant a supposition that the cause was due to a trophic nerve disturbance, translating itself into this affection of the skin; and the fact that in these cases there is sometimes spontaneous recovery or arrest would seem to give probability to such a supposition. Duhring inclines to this opinion, or least that it is due to some defect of innervation. This, however, will not be more definitely settled until the true anatomy and distribution of the nerves of the skin shall have been demonstrated in an unequivocal manner.

The treatment suggested consists of three general methods; the first was based upon the supposed etiology of the disease, and consisted in the application of the galvanic current, an ascending one being preferred. This would stimulate the nerves in a manner not to be equalled by any other means and would be unaccompanied by any deleterious results. The second method proposed was a local stimulant to act upon the blood-vessels, induce a greater flow of blood, and by that means endeavor to bring about a deposit of pigment cells, the flow at the same time decreasing the number existing at the periphery. For this purpose the acetum cantharidis was given the first place as a remedy. The third was a purely cosmetic agent. This consisted in using a burning glass, and endeavoring to tan the spots so as

to acquire the same color as the normal skin possessed.

The patient promised to carry out one of the first two methods, and being a medical man his statements could be relied upon. He chose the application of acetum cantharidis. He was told to hope but little, as the disease is considered ordinarily incurable, and that the spontaneous cures are very rare. Also that though the spots might not entirely disappear, an arrest of the process could take place.

In November, 1883, he stated that he was greatly improved; the spot on the right side scarcely noticeable and the one on the left has oases of colored hair which greatly obscure it. He adds: "I have been negligent in treatment for some time."

The questions which naturally arise, are whether this amelioration is spontaneous or not; and, if due to the agent employed, would a persistence in its use eventually lead to a cure, or complete arrest in the process. They can hardly be answered at present and indefinitely until investigations in the etiology of this disease and in the innervation of the skin have arrived to such a state of perfection as to be demonstrable facts.
—*Med & Surg. Reporter.*

A New Method of Applying Remedies in Eczema Marginatum and in Ring-worm in General

Has been devised by Dr. R. W. TAYLOR (*Journal of Cut. and Ven. Dis.*). He has always placed much confidence in bichloride of mercury as a parasiticide and has generally used it in alcoholic solution, its efficacy being thereby much enhanced. He employed a two-grain solution of bichloride of mercury to the ounce of alcohol, in a certain case, and increased the strength to four grains as

the progress was not satisfactory. The rings of eruption (eczema marginatum) advanced and the pruritus was only relieved for a limited period after each operation. It occurred to the author that if some article could be found to fix the parasiticide and prevent its being rubbed off, a cure would soon be effected. The thought occurred to him to paint over the parts after the application of the solution, with tincture of myrrh. This formed a flexible coating and the patient felt much better the next day. This was continued, and, in a few days, the patches and rings became less red, the papules less salient, the pruritus was relieved, and within a fortnight the disease was cured. The simple and compound tinctures of benzine act in the same manner. The discomfort in the application is very slight. The bichloride of mercury dissolves readily in these tinctures, and they may have a large application in the treatment of skin diseases, and ought certainly to be extensively tried in the parasitic diseases.—*Weekly Med. Review*

Nerve Lesions in Skin Disease.

It would be a great stride in the progress of dermatology if we were able to trace a definite causative relation between nerve lesions and skin diseases. In *Virchow's Arch.* Dr. MEYER relates a case of pemphigus, which commenced as a simple eczema. The patient died seven weeks from the commencement of the disease, diarrœa being the most apparent cause. At the autopsy, the cutaneous blood vessels were found obliterated by endarteritis, and the nerves showed extreme parenchymatous degeneration. While no symptom had been apparent, during life, of disease of the cord, marked scattered sclerosis was found. While he does not consider

it settled, yet Dr. Meyer suggests that the vascular obliteration in the skin, by interfering with nutrition, may have rendered it more susceptible to disease evoked by the condition of the nerve centre.—*Med. & Surg. Reporter*.

Therapeutic Notes.

The following prescriptions are frequently used by Dr. JOHN V. SHOEMAKER in the treatment of patients at the Philadelphia Hospital for Skin Diseases :

For systemic effect :

Scrotal Eczema.—℞. Tinct. hoang-nan conc. ̄j. Sig. Take from 2 to 15 drops in water three or four times daily. It is also used in other forms of eczema, especially if the sebaceous glands of the parts are largely involved.

Hyperidrosis (excessive perspiration).—℞. Zinci oxidi, gr. iv.; Extracti calami, gr. xxii.; Ft. pilul. No. xvi. Sig. One pill three or four times daily.

Erysipelas.—℞. Tincturæ ferri chloridi, Glycerine, āā ̄iss. M. Sig. Two teaspoonfuls every two or three hours until relieved.

Tubercular and Indurated Acne.—℞. Syrupi ferri iodidi, ̄ij. Sig. Half teaspoonful in water after meals.

Pustular Acne.—℞. Syrup. phosphatum comp., ̄iv. Sig. 1 or 2 teaspoonfuls in water after meals.

Psoriasis.—℞. Liq. ammonii acetatis, ̄ij.; Aloini, gr. ij.; Infus. digitalis, ̄ij. M. Sig. Two teaspoonfuls in water every two or three hours.

Pustular Eczema (especially infantile).—℞. Fluid extract malt (Wolff's), ̄iv. Sig. Two teaspoonfuls three or four times daily.

Serofuladerma and Chronic Eczema.—℞. Syrupi acidi hydroiodici, ̄iv. Sig. One or two teaspoonfuls in water three times daily.

Chronic Eczema (with deep infiltration).—℞. Oleatis niccoli, gr. v. to x.; Adipis ̄j. M. Sig. Use with care externally.

Atrophy of the Nails (to give lustre).—℞. Ungt. stanni oleatis, ̄ij. Sig. Apply well over the nail.

Tubercular and Indurated Acne.—℞. Ungt. hydrarg. nitratis, ̄ij.; Ol. chamomile (Roman,) gtt. v.; Ungt. zinci ox. benz., ̄v. M. Sig. Use externally.

Chronic Eczema (with slight infiltration).—℞. Ol. cadini, ̄ss.; Ungt. hydrarg. nit., ̄ij.; Adipis, ̄ij. M. Sig. Use externally.

Ingrown Nails.—℞. Acidi carbolicci crys., ̄i. Sig. Pencil thoroughly into the nail groove.

Seborrhæa Oleosa.—℞. Acidi boracici, ̄iv.; Aquæ aurantii flor., Aquæ rosæ, āā ̄ij. M. Sig. Apply with old muslin to the parts, and mop over the surface.

Papular Acne.—℞. Tincturæ saponis kal., ̄ij. Sig. Add one teaspoonful to one or two tablespoonfuls of water, and sponge over the surface.

Alopecia.—℞. Ungt. hydrargyri oleatis, 20 to 30 per cent., ̄ss.; Olei anthemidis nobilis, gtt. x. M. Sig. Rub in well over the surface night and morning.—*Med. Bulletin*.

Urethritis in Mumps.

In a case of mumps SCHMIDT (*Arch. de Med. Milit.*, 1883, tome i. p. 112) observed on the third day a discharge from the urethra, which lasted the same time as the swelling of the parotid gland. There was no orchitis, and the patient had not exposed himself to contagion. The discharge was ascribed to a specific inflammation of Cooper's Mery's, and Littre's glands.—*London Medical Record*.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

The Disability in Double, or Simultaneous, Fractures of the Patellæ.

Dr. S., accompanied by his wife, came into my office, walking with two crutches. His motions were deliberate and slow, and he appeared to exercise much care to prevent himself from falling. The doctor removed a splint from each knee. This splint was devised by Dr. Caro, and was so constructed as to allow only moderate flexion at the knee joint. The doctor then informed me that he was confined to his bed about five months, that he was then able to get up from time to time and sit in a chair, and that in about fourteen months he began to walk with crutches, having his knees supported by Dr. Caro's splints.

Twenty-six months subsequent to the first injury the doctor fell again, and severely sprained the right knee joint. And with the second injury he was confined to his bed about four weeks, when he got up and resumed his crutches and knee splints. The doctor thought he could walk in a little time as well as he could after the first and before the second injury.

In this case I made the following observations, namely: 1. The fragments of the right patella were separated about one inch. The direction of the separation was from without inward and downward. The bond of union was fibrous and was less prominent than the bony fragments. The upper edge of the lower fragment was somewhat tilted forward, and presented some projected points of bone. The motions of the right knee joint were greatly impaired. 2. The fragments of the left patella were separated about three fourths of an inch. The direction of the separation

was nearly transverse. The bond of union was fibrous, and was almost as prominent as the bony fragment. There were small bony projections on both fragments. The motions of the left knee joint were much impaired. The left leg could be flexed and extended about twenty degrees. 3. While the doctor was sitting down he was obliged to extend his lower limbs, not being able to flex his legs to a right angle with his thighs. In addition to this, both ankle joints were considerably impaired, contributing to the difficulty of locomotion. The doctor said that he could not walk when the knee splints were not on his knee, as he had often tried the experiment. His chief difficulty was in going up and down stairs; it was possible for him to walk on the level. Why he could not walk when the knee splints were off was not easy to explain. It might have been on account of the sense of insecurity, or from the fear of falling, consequent upon the derangement of the neuro-muscular apparatus of each knee joint at the same time.

From all that I could bring to bear on the premises out of which to draw a conclusion, I could only make an unfavorable statement in regard to the disability of this man's power of locomotion.

In this place we may briefly consider a few points in regard to the mechanics of the knee joint, since some light may thereby be shed on the extraordinary disability following a double fracture of the patellæ. The lower surface of the patella presents about two square inches of surface to the femoral condyles; the extent of this surface, however, varies in different cases; I have seen it as much as two inches square. The surface, as the patella moves under the pull of the quadriceps extensor, makes an equal pressure on the femoral condyles

at all points of contact, during flexion and extension of the leg in the act of locomotion. Now, in order to lift the weight of the body of an average-sized man, under ordinary conditions, with the quadriceps extensor and the femoral lever, the pressure of the patella on the femoral condyles will be anywhere from 500 to 1,500 pounds avoirdupois. But when the body, under certain other conditions, acquire considerable momentum, the pressure of the patella on the femoral condyles may be much greater than the estimate. On the basis of these facts we can readily see the importance of the patella in the act of locomotion, especially in going up and down stairs, for, if we suppose the patella to be very much smaller than it is, or the tendon of the quadriceps extensor had no sesamoid bone, we would have undue pressure at one point, or in one line, on the femoral condyles, and the effect might be imagined when we remember that a cubic inch of cancellous bone will only sustain a pressure of about 600 pounds avoirdupois. In fact, there would be serious damage to the femoral condyles under the supposed conditions. As a corroborating fact, we may mention that the patella is sometimes turned upon its edge—a kind of dislocation—and, by the force of the quadriceps extensor, is so firmly driven into the cancellous tissue of the femoral condyles as to prevent surgical skill from detaching it and restoring it to its normal position. In the mean time it must be kept in mind that the patella projects within the knee joint about one fourth of an inch beyond the tendon in which it is an essential part, and that as the patella with its ligament and tendon, moves in the act of locomotion around the condyloid curve of the femur, the greater stress, and sometimes the greater strain, is from the mechanical conditions, put on the more

anterior and superficial patellar structures; and that the patella, when in the powerful grasp of the quadriceps extensor, consequent on slipping and trying to prevent a fall, has its anterior fibers put under stress and strain mostly at first, and has these fibers broken first in order—when the fracture extends at once backward through the entire bone.

And, moreover, it can readily be demonstrated that the tendinous and fascial structures—as they are expanded in front of the lower end of the femur—converge, as it were, toward the patella from both sides of the limb, and are thus kept in an expanded form over the femoral condyles as the leg is flexed; and, during the flexion and extension of the leg, the tendo-patella and the adjacent fascial and capsular structures are continuously and accurately applied to the uneven surface of the anterior aspect of the condyloid end of the femur in the most admirable manner, so that, when the leg is much flexed on the thigh, and when more force is required to lift and lower the weight of the body, a very much greater surface of the femoral condyles receives the pressure, and hence the condyloid cancellous tissue in actual use is proportioned to the amount of work to be done, and is therefore conserved in its integrity during locomotion.

And, when the patella is fractured, the integrity of the tibio-femoral and the patello-femoral—or, collectively, the knee joint—is more or less seriously damaged in three directions: (1) The relations of the fibers converging to the patella may be materially deranged; (2) the angle of the ligamentum patellæ and the upper end of the tibia is made less; (3) the joint-surface of the patella is more or less deformed; that is, the functions of the neuro-muscular apparatus are more or less materi-

ally impaired. And so, if the sense of security possessed by a patient under ordinary conditions of locomotion may be greatly disturbed by a single fracture of the patella, it would be very greatly disturbed by a double fracture of the patella.

Now, while it might seem that such a case as above described ought not to result in so much disability, yet, when we come to consider all the mechanical relations of the knee joint, and when we come to consider the results of a few more cases soon to be noted, then we need not be surprised in regard to the disability resulting from a double fracture of the patellæ. I have made some inquiry in regard to the disability following double fracture of the patellæ, and do not find much that is worthy of record. Dr H. O. Marcy, of Boston, in answer to a letter of inquiry in regard to a case of double fracture of the patellæ coming under his care some years ago, writes as follows: "I have lost sight of the case referred to for some years. When last seen she could walk on the level fairly well, taking pains to keep the lower limbs nearly straight. Bending the knees gave the fear and, indeed, I believe, the sensation of falling. She had great difficulty in going up and down stairs." Dr. Marcy goes on to describe a case of single fracture of the patella which he treated some years ago, and in which he obtained a good result: that is, there was union by *short ligament*. The doctor further informs me that about two years ago, the patient by muscular effort, broke this short ligament as well as the other patella at the same instant, making a case of double fracture of the patellæ. This statement is virtually correct, yet we might say that one patella was re-fractured and the other was fractured at the same instant. Further

writes Dr. Marcy: "She"—for this patient was a female—"made very imperfect recovery with long ligamentous union. Oddly enough, the re-fractured patella gave the best result, in marked contrast with the other patella. She cannot cross from the road to the sidewalk without help, and walks by keeping the lower limbs stiff and swinging them much as in case of ankylosed knee."

Desault informs us that a patient, being cut for stone, had a convulsion, and fractured both patellæ at the same time (Gross). Sir Astley Cooper also mentions the case of a man who fractured both patellæ simultaneously. And what is more to our present purpose, as we learn from the fourth volume of the "International Encyclopædia of Surgery," Callender gives the following points as to the results of a case of double fracture of the patellæ; "I note in the case of a man who had double fracture of the patellæ some years before, that he had lost all power of recovering himself when the body was bent back from the knees, and that he was constantly falling while moving about. The interval on both sides between the fragment was less than two inches and a half."

Now, from these four cases of double fracture of the patellæ—the one noted by Mr. Callender, the two treated by Dr. Marcy, and Dr. Caro's case, reported by myself—we may conclude that the disability after such an accident will be very great; in fact, a patient having had both patellæ fractured at the same time may reasonably expect to become a most deplorable and pitiable *cripple*. Finally, let me note that this subject throws additional light on the disability that may follow a case of single fracture of the patella. And if it may be said that double fractures of the patellæ are so rare that we shall not be likely to

meet such a case, let me reply that such an accident may happen at any moment, and then the surgeon who is called to the case will not, we trust, be unthankful for our trying to find out the disability and its cause in double fracture of the patellæ.

[This gloomy picture of the unfortunate who sustains a double fracture of the patellæ will be modified somewhat when we state that Dr. L. D. Mason of Brooklyn, has treated a case of this kind, produced by throwing a ball, with almost perfect success as to the subsequent usefulness of the limbs.] ED.

The Use of Hodge's Pessary in Fractures of the Lower Jaw.

Dr. W. J. NAISMITH (*Lancet*) describes a fracture of the lower jaw at the symphysis, with a transverse wound two inches in length over the mental protuberance. The fragments of the jaw were freely movable, and it was desirable to apply an apparatus which would fix the bone in place immovably, and at the same time allow the wound to be dressed. Accordingly a Hodge pessary was brought into use, by bending it so as to allow the chin to protrude through its ellipse. One bar was moulded so as to support the fracture anteriorly, the other steadied it from below, while the rounded ends afforded admirable lateral pressure on each side, at a point in front of the angles of the jaw. To the rounded ends of the pessary tapes were sown, two on each side, over the padding, and secured over the head, or to a fillet, and around the neck by small buckles. For fractures of the maxilla at or near the symphysis, with or without wound, the Hodge's pessary seems well adapted. It can be bent to fit any size of jaw, and in the qualities of comfort, lightness and coolness, compares very favorably with

the solid cumbrous appliances included under the head of moulds.—*Med. Med. Jour.*

Downward and Backward Dislocation of the Acromial End of the Clavicle.

The *New York Med. Record* says: Dr. CASSIUS D. WESCOTT, of Chicago, Ill., sends us a report of the following very rare case: "Mrs. K—, aged twenty-six years, while going down stairs made a misstep and fell three steps, striking against the baluster in such a way as to drive the acromion process of the scapula over the end of the clavicle. I saw her twenty-four hours after the accident. There was little swelling and no pain, except upon motion of the arm; notable absence of the usual prominence of the clavicle in its outer half, but by burying my fingers deep in the neck, I could outline the bone to its extremity, as it passed beneath the acromion, and demonstrate the absence of fracture. With the assistance of my friend Dr. Luce, the patient was etherized and I reduced the dislocation by putting my knee between the shoulders and drawing them forcibly backward. Some difficulty was experienced in maintaining the reduction, but patient recovered without 'impairment of function' and with no visible deformity. Prof. Edmund Andrews in the 'International Encyclopedia of Surgery,' says that only five similar cases have been reported."—*Can. Med. & Surg. Journal.*

Collodion for Red or Broken Noses.

To swollen parts which cannot well be bandaged, collodion is especially applicable for the compression attending its contraction. I was consulted in the case of a boy disfigured by a red and swollen nose, which

became very pale and visibly contracted just after I painted it with successive layers of collodion. I repeated the application three times in a fortnight, producing shrinkage of the organ to its natural size and color. When the nasal bones are fractured a very effective mold for keeping them immovable, after adjusting them with the fingers, may be thus made: Place over the nose a thin layer of absorbent cotton soaked in collodion, taking care that the application extends sufficiently on each side to give buttress-like support. The patient compares the feeling to the application of a firm bandage on the nose, and the bones consolidate effectively under the shield, which may be renewed as it cracks and peels off.—Mr. SAMUEL GAMGEE.—*California Med. Jour.*

Subungueal Exostosis.

M. HEURTAUX exhibited a subungueal exostosis of the right big toe, which he had removed from a lad of fifteen. The first manifestation of this tumor was about a year ago. At first, pains were only slight, but the wearing of boots became very painful. Three or four months later the nail was raised, then perforated as of excessive usage. Pain became unbearable, the exostosis was the size of a hazelnut. In order to remove it the nail had to be extirpated first, a horny layer which covered it had to be detached, then a hollow gouge was plunged in it obliquely, and by this means the tumor was lifted out.—*St. Louis Cour. of Medicine.*

The Treatment of Scalp Wounds.

In view of the danger of causing erysipelas, inflammation, or suppuration, when the ordinary sutures are used for scalp wounds, we hail with pleasure

the suggestion made by a correspondent of the *Lancet*, which, while not very new, is yet worthy of repetition:

The scalp is remarkable for the looseness with which it is attached to the subjacent bone, and in simple cuts through the scalp blood and serum can readily force a way between the scalp and the bone, and the accumulation induce suppuration. Still more frequently the scalp is torn away from the skull in a longer or shorter flap, and then, if the edges of the wound are united, the serum effused from the under surface of the detached flap is confined beneath it, and suppuration occurs. If this fact be neglected, suturing scalp wounds is a dangerous step; but if it be recognized and acted upon, the sutures are altogether devoid of danger. The main thing in the treatment of any flap scalp wound, however slight the flap may be, is to secure primary adhesion of the flap to the subjacent pericranium and completely prevent accumulation of serum beneath it. This must be secured by properly adjusted pressure; and, in view of this primary indication, but secondary importance should be attached to the rapid healing of the edges of the wound. If a good bunch of hair be taken up on each side of the wound and twisted, and then used as a suture, it is obvious that the whole surface of the scalp from which the hair springs is held compressed against the subjacent skull, and hence this form of suture skilfully employed really fulfils the indications of treatment very well. It is an error to suppose that the tissue of the scalp is more intolerant of the presence of a suture than the skin of any other part of the body.—*Med. & Surg. Reporter.*

The Correction of Deformities by Modification of the Thickness of the Sole of the Shoe.

Before the New York County Med. Ass. (*Med. News*), Dr. WILLIAM DETMOLD made some remarks, illustrated by diagrams on the blackboard, on the correction of certain deformities in the young by the simple device of thickening the inside or the outside edge of the sole of the shoe, as required. In weak ankles, which were exceedingly common among girls, owing to the breadth of the pelvis, which gave a tendency towards knock-knee, there was always a protrusion of the internal malleolus. This was ordinarily treated by placing a certain amount of stiffening on the inner side of the shoe, and, this failing, by the use of iron splints. The simplest and best way of correcting the deformity, however, was by making the inner side of the sole thicker than the outer, which had the effect of lifting the weight off of that portion of the skeleton. The same method answered for the correction of knock-knee but when the child was bow-legged, the thickening was to be placed on the outer instead of the inner side of the sole. If one leg was shorter than the other, there would inevitably result more or less tilting of the pelvis, which had the effect in time of producing lateral curvature of the spine, with its secondary or compensating curvature. This could easily be remedied, when taken in time, by making the sole of the shoe for the foot of the shorter limb sufficiently thick to bring the transverse axis of the pelvis at right angles to the lower extremities. Dr. Detmold also explained his method of treating flat-foot (which was common in young girls who were poorly nourished and who were obliged to remain in a standing position much of the

time), as well as elevation of one shoulder above the other. In five out of every nine young girls, he thought, the right shoulder was a little higher than the left.—*Med. & Surg. Reporter*.

Water Dressings for Wounds.

Listerism means cleanliness; hence, when Dr. J. J. LARKIN gives a thrust at Listerism in the *Ft. Wayne Jour. Med. Sci.*, delicate though it is, and then goes on to describe his cold water dressing, it seems rather paradoxical, since his recommendation really embodies Listerism, because it advocates cleanliness. He has had most satisfactory results in incised wounds and amputations, with dressings of cold water with *one-half per cent. of carbolic acid*. Cold contracts the blood and absorbent vessels, prevents swelling and pain, and consequently inflammatory actions; water soothes, cleanses and facilitates drainage; rest is the only condition remaining to complete the best plan for recovery.

Congenital Epulis.

The following case, which, if not unique, is certainly very rare, is reported in the *Brit. Med. Jour.*, by Dr. ALBERT A. GORE:

Mrs. M. J. Mc. C., aged thirty, primipara, was admitted into the hospital on March 5, at 7 A. M., and confined at 3.15 P. M. There was a considerable flooding from a placenta partially attached to the fundus uteri, and a rent in the cervix. Having removed the placenta and checked the immediate hemorrhage, I found, on examining the baby, that the mouth was filled by a bluish-red tumor, which projected between the lips, and was firmly adherent to the lower gum immediately to the right of

the mesial line. It had a very peculiar appearance, and precluded all attempts at sucking, but not of swallowing, when a little milk and water were introduced on the left side by means of a spoon. On March 8, I passed a double carbonized silk ligature, from within outwards, through the middle of the tumor, tying it tightly at either side. It came away in two days. A second smaller growth to the right of the first, was treated in a similar manner on March 17. When this last came away there was a good deal of bleeding from the gum, which was only arrested by the application of a point of solid silver-nitrate. The infant did very well, and the gum is now (March 24) quite healed.—*Ibid.*

Closure of the Jaws and its Treatment.

Dr. J. EWING MEARS, of Philadelphia, in an able paper in *The American Journal of the Medical Sciences*, discusses the various operations which have been suggested for the relief and cure of permanent closure of the jaws and the objections urged against them. He then narrates a case in which he operated in the following manner: By division of the ramus of the jaw, about its middle, exsection of the condyle and division of the insertion of the temporal muscle, thus releasing the coronoid process and affecting its removal with the condyle—division of the masseter muscle at its points of origin—non-interference with the cicatricial band. By this plan he hoped to secure sufficient space for free movement of the remaining portion of the ramus, and he proposed to utilize the cicatricial band as a *quasi* ligament, and obtain movement of the bone between this band and the internal pterygoid muscle. By division of the masseter at its point of

origin, he proposed to relieve the tension of this muscle and more effectually prevent union of the divided fibres. The plan of operation suggested and practised is novel, in the fact that it includes removal of both coronoid and condyloid processes with the upper half of the ramus, as well as division of the masseter, external pterygoid, and temporal muscles, at the point of origin of the former, and the insertion of the latter. The advantages claimed over other methods are: 1. Its application to all forms of permanent closure, that due to temporo-maxillary ankylosis, as well as to cicatricial formations. 2. The utilization of the entire body of the jaw in opening the mouth, not only affording in this way greater advantage in mastication and articulation, but serving to prevent deformity. 3. The formation of a more perfect artificial joint in the removal of both processes, thus overcoming the resistance of the more or less fixed upper segment, when the joint is made either in the body or the ramus of the bone.

Floating Kidney.

Cutting down upon a floating kidney in order to attach it to its normal position, although not new, is certainly a proceeding of interest. Mr. Ivar Savensson presented to the Society of Swedish physicians, a girl of 21 years on whom this operation had been performed. By an incision made along the external boarder of the sacro-lumbalis the kidney was discovered, drawn into the wound and fixed to the fibrous tissue by 14 sutures which involved only the capsule. The result of the operation exceeded the expectations of Dr. S. There was no complication and the kidney remains fixed. The patient was as now well and could follow her

duties. She complains of no more pain, which was formerly so severe that she became a burden to her relations. The surgeon considers this operation preferable to extirpation.

Internal Hemorrhoids—Treatment by Ligation.

Clinical lecture by Prof. GROSS (*Col. and Clin. Record*): This man, twenty-seven years of age, has had for many years, more or less pain in the back, which had become much aggravated during the past week. For the past four months he has had hemorrhage every time the bowels have been moved, and at the same time there was a protrusion of a tumor, about as large as a grape, from the anus.

When a patient presents such symptoms as these, you should, of course, examine the rectum to see if hemorrhoids are present, since we assume that he is suffering from internal, blind or bleeding piles. They are called internal because they are inside of the anus, bleeding, for a very obvious reason, and blind because they cannot be seen until they come down.

As a case of hemorrhoids has not been before you for some time, I will make a few general remarks upon this subject. It not unfrequently happens, particularly in persons of a costive habit, that a little tumor makes its appearance at the margin of the anus. The patient is aware of a pain shooting up the back, and also of a sense of soreness, and, on examining the anus, finds a small lump. This is an external hemorrhoid. It is caused by the rupture of one of the inferior hemorrhoidal veins at the margin of the anus, where the mucous membrane and skin join. As a result of the rupture a little blood is poured out into the connective tissue,

and coagulates, forming a hard, somewhat painful tumor at the margin of the anus.

The treatment of such a condition of affairs is extremely simple. It is not a wise plan to operate upon an external pile immediately upon its formation, or before the blood is coagulated, for under such circumstances, if it be laid open, the cavity will refill and the pile be reproduced. We should wait until the blood has clotted, as shown by the hard feel of the tumor, when, the patient having been placed upon his side, with the thighs and legs fully flexed, or in the knee and elbow position, the tumor is grasped with the thumb and finger, and laid open with a curved bistoury, and the clot expressed.

The pathology and treatment of internal hemorrhoids are entirely different. Internal piles occur beneath the mucous membrane of the rectum, not at the margin of the anus. There is underlying the mucous membrane, in the connective tissue between the mucous and muscular coats of the bowel, a large number of arterial and venous vessels. The veins become enlarged and varicose, very much as the veins of the spermatic cord in varicocele, or the veins of the extremity in varix. Not only do the veins enlarge, but the arteries also become dilated and varicose, so that, in the majority of cases, the tumor is composed of dilated veins and arteries, the veins, however, predominating, covered with the mucous membrane of the bowel. For all practical purposes this description is sufficient. An internal pile is angioma, made up of dilated and varicose veins and arteries, with a predominance of veins. This is the usual form of internal pile. In some cases this predominance of the veins is so great that the part played by the arteries is obscured, so that we may speak of an

angioma composed entirely, or almost entirely of enlarged veins, or a cavernous angioma. There is still another form which, although uncommon, is, however, more frequently met with than the pure venous pile, that is the one in which the capillary arteries have become enlarged to such an extent as to predominate over the veins. Such a condition is diagnosed by the vivid red appearance of the mucous membrane, and by the fact that the surface, through the growth of the capillary loops, is thrown into papillæ, causing it to present the appearance of a strawberry.

In managing an internal pile, you can readily understand that if we were to incise it as we do an external pile, there would be very free hemorrhage, not only from the veins, but also from the arteries. Hence it is that, in the treatment of internal hemorrhoids, we never cut into the tumor. In older days excision was practiced, but not a few patients bled to death. At the present time we aim to produce obliteration of the blood vessels, which may be done in a variety of ways. The operation which I shall show you is that of ligation. The bowels should be moved by an enema, and just before the operation the patient sits over a bucket of boiling water. The steam relaxes the part and a little straining brings the pile into view. As the man strains, you can see two tumors protrude. Around the small one it will be sufficient to place a ligature, but I shall tranfix the larger tumor with a needle armed with a double ligature, and tie it in two sections. When there are a number of piles, say six or seven, it is not necessary to operate on all. If four are tied, the object will be accomplished; the amount of inflammation set up being sufficient to obliterate all. You should never allow a patient to walk about after any operation for hem-

orrhoids, no matter whether it is a simple one, as in the present instance, or a more severe one, as clamping the tumors, cutting them off, and searing the cut surface with the hot iron. The patient must go to bed, so as to run as little risk from pyæmia and tetanus as possible.

In your books you will find it stated that a certain amount of laudanum should be thrown into the bowel, or an opium suppository be used after the operation. I consider this a bad practice. The rectum is already stuffed up enough. If the patient suffers pain, one-third of a grain of morphia may be given hypodermatically. The bowels should be confined for three or four days, or until the patient begins to feel a little uneasy about the belly, when a free and easy motion may be secured by injecting six ounces of sweet oil, and following it up the next morning with half an ounce of castor oil, by the mouth.

After all operations upon the bowel, you should inquire into the condition of the bladder, since there is often reflex spasm of the muscles of the urethra and the neck of the bladder, causing retention of the urine, which will have to be relieved with the catheter.

Three Cases Illustrating some Points in the Pathology of Certain Injuries of the Shoulder Joint.

Dr. C. B. NANCREDE read the following paper :

A few preliminary anatomical points must be passed in review for the ready comprehension of my later remarks. The shoulder joint differs in many important points from any other articulation of the body. A moments reflection upon the almost unlimited range of movement which it enjoys will at once suggest that the ligaments of this artic-

ulation can not be the means by which the joint surfaces are held in apposition; otherwise anything like freedom of movement would be impossible in a ball-and-socket joint where the socket is so shallow as in this articulation. What, then does hold, firmly apposed, the articular surfaces? It must be something always tightly stretched, yet always capable of lengthening, or rather always practically loose. Nothing but muscle could fulfil any such purpose. In truth, the muscles surrounding the joint are the most important ligaments the articulation possesses. When these are paralyzed, or in the cadaver, the head of the humerus readily falls away from the glenoid fossa. Bearing this fact in mind, you will clearly apprehend that the joint surfaces are kept pressed together solely by muscular tension. Again, the glenoid fossa, unlike the socket of any other important joint, *has no epiphysis*, which explains to a degree the fact that even in the young the head of the humerus may be so affected as to demand excision, while the glenoid process is either entirely or nearly healthy. Closely related with the scapulo-humeral joint we find a number of bursæ, some of which commonly communicated with the joint while others do not. To the former alone I shall devote my remarks. There is a large one between the acromial process and the coraco-acromial ligament upon the one hand and the shoulder capsule upon the other. Two bursæ—the exact sites are unimportant for our present purposes—are situated between the subscapularis muscle and the capsule. An occasional one is placed between the infra-spinatus muscle and the capsule, into which it often opens, as do the others just mentioned. Let an inflammation be set up in these sacs, and it certainly spreads to the joint itself, should communication exist, or nearly

as surely by mere contiguity of tissue, if no opening between joint and bursæ is present. The articulation is securely covered in by the voluminous deltoid, so that any direct injury to the fibrous or synovial tissues of the joint is almost impossible from direct force, as a blow, although a twist *may* injure it, notwithstanding the latter is more apt to tear the bursal walls. The upper epiphyses of the humerus—of which there are three, coalesce at five years, but they leave a layer of epiphyseal cartilage between head and tuberosities and shaft, which in places either coincides with the capsular attachment or is actually within it. From these anatomical facts it must be clear that direct force, as a blow, can rarely injure the joint itself, but must set up trouble either in the surrounding bursæ or in the epiphyseal cartilage, or in both. Once again, the interior of the joint, the muscles moving the joint, and the skin over their attachment, are all supplied by the same nerve or nerves; so that let a joint injury start where it may, the articulating surfaces of the shoulder joint are subjected to such an injurious degree of pressure from direct or reflex muscular contraction as it is possible for no other articulation. The bearing of these anatomical facts upon prognosis and treatment need hardly be pointed out.—*N. Y. Med. Journal.*

Seven Common Surgical Follies.

Dr. JOHN B. ROBERTS, of Philadelphia, in a paper read before the Westchester Medical Society, and published in the *Polyclinic*, points out what he holds to be follies in connection with seven surgical procedures. He calls them the ether folly, the incision folly, the sponge folly, the styptic folly, the suture folly, the adhesive plaster folly,

and the dose folly. The ether folly is almost universal. It consists in allowing the inhalation of atmospheric air with the vapor of the ether, as it is proper to do when giving chloroform. In giving ether the napkin holding it should not be removed from the patient's nose and mouth. When it is necessary to replenish the anæsthetic the corner of the napkin should be turned up and a fluid ounce of the ether dashed upon it, or it may be poured on the outside of the napkin and covered with a large dry towel. The pure ether vapor must alone be inhaled to secure its best effects. The only exception to this rule is when blueness and congestion of the face occur as a result of spasm of the respiratory muscles. Usually one deep inspiration will be sufficient to relieve this, when the napkin should be immediately replaced. Squibb's ether is in no way superior to that of other reputable manufacturers.

The incision folly consists in making a cramped cutaneous incision, instead of one sufficiently large to fully display the tissues needing examination. A cut of the skin three inches long is no more dangerous than one two inches long. In opening abscesses a free cut is more satisfactory than the mere puncture or button-hole incision.

The sponge folly consists in the employment of sponges which have done previous service. They are seldom or never properly free from septic matter. To obviate this danger napkins or towels are to be employed instead of sponges. Japanese paper napkins answer a very useful purpose. Absorbent cotton is valuable but it is expensive, and besides it is apt to leave filaments entangled in the wound.

The styptic folly is also a very common one. Alum, tannin, and that vilest

of all styptics, Monsel's solution, prevent or delay union by first intention by irritating the edges of the wound and preventing their coaptation. Except when a large vessel is severed pressure is all that is demanded. When such a vessel is divided ligation, torsion or acupressure should be employed, but under no circumstances styptics.

The suture folly. The old idea that sutures should not be employed in the scalp has been long exploded, but still another folly exists in connection with sutures, and that is that silver wire only should be employed for suturing purposes. Iron wire is equally valuable and much less expensive. A nice iron wire can be bought for five cents a spool. If it becomes a little rusty, it can be rubbed clean in a moment should the operator object to the presence of a small amount of oxide of iron in the wound.

The adhesive plaster folly is prevalent. The enveloping of a stump or the covering up of an incision with adhesive plaster prevents drainage, is uncleanly and does no good. Adhesive plaster has little or no value in surgery, except for making extension, and preventing motion in cases of fracture.

Sponges, styptics, and silver wire are useless and worse than useless, and their banishment will be a long stride in the progress of surgery.

The dose folly consists in the exhibition of an insufficient quantity of medicine. It should more properly be called the *small* dose folly. Of what use is a sixteenth or an eighth of a grain of morphia to a man in severe pain? Give him a quarter or even a half grain, and repeat if necessary. And what is true of morphia is true of all other drugs—quinine, atropia, strychnine, digitalis, mercury, pilocarpine, etc.—they must be given with a bold hand to produce their effect. First, be sure of your diag-

nosis and then go ahead. Many surgeons fail to cure because of the tentative use of drugs which comes of uncertainty of diagnosis.—*Med Age*.

The Surgical Usefulness of Iodoform.

Dr. G. FRANK LYDSTON, (*Jour. Med. Sciences*): Dr. Hofmakl, at the conclusion of a paper on the surgical uses of iodoform, draws the following conclusions: 1. Iodoform is an excellent disinfectant, and, as a rule, is a painless application to wounds. 2. On account of its slight solubility, it is of little value in complicated wounds of cavities. 3. It does not prevent the occasional outbreak of erysipelas. 4. It is not a specific against scrofulous or tuberculous processes, and develops its healing properties most notably in ulcerous processes. 5. By keeping wounds fresh and clean it furthers granulation, though it has but little influence on the final cicatrization of the wound. 6. Very thin layers of powdered iodoform do not hinder union by first intention. 7. Pharyngeal and laryngeal diphtheria of children, iodoform does not give much better results than other antiseptics. 8. In wounds and ulcers of the mouth, rectum, vagina, as well as in open, easily accessible wounds in the cavities of bones, iodoform in the form of a thirty to fifty per cent. iodoform gauze, is an excellent antiseptic dressing. 9. Parenchymatous injections of iodoform generally cause a great deal of pain, and it cannot be said that they give very excellent results in fungus diseases of joints and glandular swellings. 10. Iodoform ointments and plasters are often of good service in parenchymatous goitres and chronic swelling of glands, joints and tendons. 11. Iodoform in large quantities is undoubtedly dangerous, and is more productive of

good results and less hurtful in small doses. 12. Childhood is not a contra-indication for the use of iodoform. 13. The preliminary cleansing of fresh wounds with weak carbolized water before using the iodoform dressing is of no advantage, so far as Hofmakl's experience goes. 14. The healing of scrofulous and tuberculous sores by iodoform does not prevent their return. 15. Iodoform is an excellent means for the thorough removal of disagreeable odors of neoplasms which do not admit of operation. 16. The occasional syringing of suppurating cavities with small quantities of iodoform emulsion will often have a favorable action on the quality and quantity of the pus. 17. The introduction of iodoform bougies into the urethra and bladder will often alleviate pain, as also in vesical tenderness and suppurative conditions of the bladder, and will exert a favorable influence on those conditions of the urine in which rapid decomposition takes place. 18. The application of iodoform bougies to long fistulæ of the soft parts is more hurtful than useful, as the fistulæ are only stopped up, and the products of decomposition are not discharged. Equally unwise is the filling up of the mouth of a fistulæ with dry powdered iodoform.

VENEREAL DISEASES.

Syphilitic Test.

Dr. H. C. WOOD's Syphilitic Test. Persons are often unaware that they are suffering from syphilis. They honestly believe that they never had primary or secondary symptoms; these symptoms may, however, have been present, but so slightly marked as not to attract attention. Again, this is one

of the points about which human nature often fails. People, even when death is staring them in the face, and their lives hang upon the truth, will make false statements. As we have a touchstone by means of which we are able to decide whether or not a patient is suffering from cerebral syphilis, I ask no questions, but apply the test where I have reason to suspect any disorder. It is a serious matter to mercurialize a patient, but it does no harm to produce iodism, so that when making the test I always employ iodide of potassium. If I find that ten grains three times a day produces symptoms of iodism, I am almost sure that the case is not one of specific disease. If, on the other hand, the patient takes from one-half to one drachm of iodide of potassium and waxes fat thereon, I am almost sure that he is the subject of specific disease. There are some persons, not syphilitic, who will stand large doses of iodide of potassium, but such cases are rare, so that when a patient will take half a drachm of the remedy three or four times a day it may be concluded that he is syphilitic. I say this with one reservation. Persons who have gradually accustomed themselves to the use of iodide of potassium, as for instance, those who are asthmatic will stand large doses of this drug, even when not suffering from syphilis. In such a case there will be the history of the long-continued use of the remedy. You must remember, also, that there is a syphilitic asthma, so that the relations of iodide of potassium to asthma are in many cases easily explainable.—*Gaillard's Med. Journal.*

The Treatment of Syphilis.

Bichromate of potass as an antisyphilitic has for partizan in Saxony Dr. Guntz, and in France Prof. Vulpian.

The former employs it in solution charged with carbonic gas. as follows : *R.* Bichromate of potass, 2-3 gr. ; nitrate of potass, 2 gr. ; nitrate of soda, 2 gr. ; chloride of sodium, 4 gr. ; water charged with gas, $\bar{3}$ xx. M. Vulpian also recommends it in dyspepsia depending upon a catarrhal affection of the stomach, simulating carcinoma of that organ. He prefers it in the form of pills : *R.* Bichromate of potass, 1 gr. ; extract of valerian, 10 gr. Divide into 5 pills. One, two or three in the day. It will be remembered that it was Prof. Vulpian who attended the late Count de Chambord, and having recognized that disease as catarrh of the stomach, prescribed these pills, but, it must be added, with little result.

Treatment of Condylomata.

Salicylic acid and boracic acid are both very good remedies in syphilitic condylomata. Formerly, we often used to remove larger warts of that kind with the scissors, and then cauterized the wound ; but since we have been employing the following powder, which is dusted three times daily over the new growths, we have never had occasion to have recourse to any other remedy : *R.* Hydrarg. muriat. mit. gr. xxx ; Acid. borac., gr. xv ; Acid. salicylic, gr. v. ; M. f. pulv. All moisture and disagreeable odor at once ceases, and who has not seen the effect of this powder, would scarcely believe it : the condylomata almost visibly dwindle away.—*Med. & Surg. Reporter.*

Cerebral Syphilis.

Polyuria it is held by Professor SEMMOLA may be due to a form of cerebral syphilis. He has reported three cases (*Revista de Ciencias Medicas*), in one of

which the patient passed in twenty-four hours forty-three pints of urine, with a specific gravity from 1001 to 1005. He had been treated by several physicians without success, and finally put himself under the care of the Professor, who discovered that he had chronic syphilis, and attributed the polyuria to that affection. He was treated with the albuminate of mercury hypodermically and iodide of potassium, and was cured in two months.—*Weekly Med. Times.*

Bartholow on Syphilis.

"I shall give this patient twenty grains of iodide of potassium three times a day, and also one twentieth of a grain of bichloride of mercury, with one grain of extract of chinchona three times a day, in the form of a pill. As you see, I do not give iodide and mercury together. I direct a simple solution of the iodide to be made and the patient to take twenty grains in four ounces of water, three times a day, before meals, so as to secure its diffusion through the system before the mercury is administered. I think that it is always an error to combine these two remedies, for in such a combination you do not, as is commonly supposed, obtain the beneficial effect of both drugs."—*The Medical World.*

Formulae.

Dr. Q. C. SMITH sends the following formulas to *Texas Courier of Medicine*:

GONORRHOEA INJECTION.—℞. Bichloride hyd., gr. 1-4; mucilage accacia, ʒ j.; aqua dist. q. s. ft. ʒ iv. M. Ft. sol. S. Two syringefuls just after each urination.

DEODORIZED IODOFORM.—℞. Iodoform in fine powder, dr. ij.; tanic acid, dr. j.; balsam Peru, oil sassafras, oil

roses, oil camphor, oil eucalyptus, aa drops iv. M. Ft. powder. S. Put in vial.

GONORRHOEA INJECTION.—℞. Mur. hydrast., chloral hydrate, sulph. quinine, sulph. morphia, aa gr. j.; aqua dist. q. s. ft., ʒ viii. M. Ft. sol. add: sulphurous acid, dr. j. M. Ft. sol. S. Two syringefuls just after each urination.—*Ibid.*

A New Injection for Gonorrhœa.

This sedative and antiseptic injection may be used even in the acute stage with good results. It is claimed to be superior to any other single injection: ℞. Pulv. iodoform, 20; acidi carbolici. 10; glycerini, 80; aquæ destillatæ, 200.—*South. Med. Record.*

Chloride of Zinc in Gonorrhœa.

LLOYD'S choice of chloride of zinc in gonorrhœa was based on his conception of the affinity it has for albumen. His formula: ℞. Zinci chloridi, gr. j.; aquæ puræ, ʒ j. M. Sig. To be used as an injection every eight hours. In addition the perineum and penis are to be bathed frequently with tepid water. We use the injection as often as six times a day, directing the patient to micturate before each injection.—*Ibid.*

Gonorrhœa.

Dr. R. C. McCann sends the following to the *Med. Brief*: ℞. Ol. sandalwood, 3 drachms; liq. potass, 2 drachms; sacch. alb., 3 drachms; gum accaciæ, 3 drachms; aquæ cinnamon, 6 ounces. M. ft. sol. Sig.: Teaspoonful ter in die. ℞. Plumbi acet. 8 grains; zinci sulph., 8 grains; morph. sulph., 1 grain; aquæ rosæ 8 ounces. M. ft. sol. Sig.: Inject ter in die.

DISEASES OF THE SKIN.

The Treatment of Eczema.

Dr. LOUIS A. DUHRING, in the course of a series of lectures on dermatology, delivered before his class in the University of Pennsylvania, and reported in the *Medical News*, discusses the subject of eczema, which he defines as "an acute or chronic inflammatory, non-contagious disease of the skin, characterized at its commencement by erythema, papules, vesicles or pustules, or a combination of these lesions, accompanied by more or less infiltration and itching, terminating either in discharge with the formation of crusts, or in desquamation." This affection, he says, is popularly known as *tetter*. We cannot but regard his acceptance of this popular term as a synonym for eczema, as unfortunate; it is misleading. While it may be thus synonymous in some sections it certainly is not so in all. Within the limits of our practice, *tetter* and salt rheum are the popular synonyms for psoriasis.

Dr. Duhring recognizes four varieties of eczema: *E. erythematosum*, *E. vesiculosum*, *E. papulosum*, and *E. pustulosum*. There are also certain subvarieties: *E. rubrum*, *E. squamosum*, *E. fissum*, and *E. verrucosum*.

Eczema is the commonest of skin diseases, constituting upwards of 40 per cent. of the whole, according to observations at leading clinical centres. It is liable to be confounded with certain other of the dermatoses and care is always necessary in diagnosis. It is a curable disease and requires both local and constitutional measures. Among constitutional remedies saline aperients are important, to which, in the case of children, rhubarb may be profitably added. Diuretics are also sometimes in-

dicated, as acetate of potassium, the carbonate of potassium and liquor potassæ. Tonics, as iron, quinine and arsenic, and cod-liver oil must also be given in many cases. Arsenic, our most valuable remedy, must be given with discretion. Two-minim doses of Fowler's solution will be found large enough, and the remedy must be continued for sometime. It is best adapted to chronic cases, and is seldom or never indicated in the acute variety.

Local treatment is important and is always demanded. The variety of the disease should be taken into consideration, also the amount of surface involved, the region, the duration, and the history. In the erythematous variety, usually met with about the face, much benefit may be derived from the use of lotions of carbolic and boracic acids. The former is of particular value, and may be thus used: \mathcal{R} Acidi carbolic, 3 ss.; glycerinæ, gtt., xv.; alcoholis, f. 3 j.; aquæ, f. \mathfrak{z} iv. M. Sig.—Lotion. Apply several times a day.

The following lotion of prepared calamine and oxide of zinc is also recommended: \mathcal{R} Calaminæ præparatæ, 3 ss.; zinci oxidi, 3 ss.; glycerinæ, f. 3 ss.; aquæ calcis, f. 3 iv. M. Sig.—Shake before using. Apply as a lotion three or four times a day.

Or the compound sulphide of zinc lotion, made as follows: \mathcal{R} Zinci sulphatis; potassii sulphureti, ââ 3 ss.; aquæ rosæ, f. \mathfrak{z} iv. M. Sig.—Apply twice a day for ten minutes each time.

In the vesicular variety, in the acute stage, excellent results will often follow the use of black wash followed immediately by oxide of zinc ointment. Oxide of zinc ointment is a valuable, mildly stimulating, drying ointment, and is useful alone and also in combination with other remedies. Of the various dusting powders, the following is one of

the best: \mathcal{R} . Talci veneti, \mathfrak{z} iv.; zinci oxidi, \mathfrak{z} j.; amyli, \mathfrak{z} iij. M. Sig.—Dusting powder. Apply freely.

Salicylic acid, ten or fifteen grains to the ounce of lard, and oleate of zinc, one dram to the ounce, do well in some cases. The calamine lotion above referred to is also valuable in the vesicular variety.

Papular eczema, as a rule, requires strong lotions. Among the best is one of carbolic acid, as follows: \mathcal{R} . Acidi carbolici, \mathfrak{z} iss. to \mathfrak{z} iij.; aquæ, Oj. M. Sig.—Use as a lotion several times a day.

Thymol, one to three grains to the ounce of water, may also be mentioned, and liquor picis alkalinus, the formula for the later being as follows: \mathcal{R} . Picis liquidæ, \mathfrak{f} \mathfrak{z} ij; potassæ causticæ, \mathfrak{f} \mathfrak{z} j; aquæ, \mathfrak{f} . \mathfrak{z} v. M.

This is to be diluted with water in the strength of one drachm to two or four ounces of water. The liquor carbonis detergens, or alcoholic solution of coal tar will be found serviceable.

Strong sulphur ointments are also sometimes very valuable.

In the pustular variety, ointments of calomel, white precipitate and sulphur, from one scruple to drachm to the ounce of lard, may be recommended. In the squamous variety, tar is the most valuable remedy, and may be used in the form of the oil of cade, one or two drachms to the ounce of lard, or in the form of the officinal tar ointment, or as the liquor picis alkalinus, mentioned above. Ammoniated mercury, fifteen to forty grains to the ounce, may also be mentioned as serviceable. Where large surfaces are involved, a remedy like tar should first be tried on a small patch, to determine whether it will agree.

In eczema rubrum of the leg, the rubber bandage may frequently be used with benefit. In concluding the subject

of treatment, it may be added that there is no one remedy which can be positively relied upon to effect a cure in a given case, especially where the lesions are extensive.—*Therap. Gazette*.

Ringworm.

Dr. L. H. WASHINGTON (*St Louis Med. Jour.*): Two or three applications of the following, at intervals of eight or ten days will frequently effect a cure: \mathcal{R} . Iodine, \mathfrak{z} ij; kerosene oil, \mathfrak{z} j. M. To be applied with a firm brush.

Dr. R. W. Taylor reports the best results from a paint composed of tincture of myrrh, with four grains of corrosive sublimate to the ounce.

Tincture chloride of iron applied with a brush or mop two or three times a day for a few days, then once a day, seldom fails to cure ringworm, and is safer than most applications.

Into an ounce of water throw more sulphate of copper than it will dissolve and touch the parts with this solution several times a day.

Strong acetic acid used as a lotion will often cure ringworm of the scalp.

In the different forms of ringworm, and in that troublesome form of the disease which affects the scrotum and the inner side of the upper part of the thighs, the application of boric acid acts like a charm. A solution of a drachm of the acid to an ounce of water, or as much as the water at an ordinary temperature will take up, is employed. The affected parts should be well bathed in the solution twice daily, some little friction being used, and the solution allowed to dry on the part.—*Surg.-Maj. Watson*.

In ringworm of the scalp, whatever lotion is used should be well rubbed in so as to enter the hair tubes, otherwise it will be of no avail

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

The Treatment of Fractures of the Patella by the Plaster-of-Paris Splint.

Dr. JAMES L. LITTLE (*N. Y. Med. Journal*): Immediately after the receipt of the injury I elevate the limb slightly and place it on a pillow or a single-inclined plane, and wait until the swelling and inflammatory action which follow have subsided. The limb is placed in this position simply for the comfort of the patient, and not for the purpose of relaxing the quadriceps extensor muscle, and thus preventing the separation of the fragments, which was formerly considered necessary. Although I have often attempted, I have never been able to demonstrate that it made any appreciable difference in regard to the separation of the fragments whether the limb was in a straight position or with the thigh flexed on the pelvis.

Sometimes, when the effusion into the synovial cavity is great, I apply pressure, as soon as the patient is able to bear it, by means of a bandage. When the swelling has subsided, which takes from five days to a week, the following dressing is applied: A posterior splint is made of two thicknesses of bleached Canton flannel, strengthened in the middle, under the knee, by two extra layers; this is made long enough to reach from a little above the ankle to above the middle of the thigh, and wide enough to cover two-thirds of the circumference of the limb above and below the joint, but at the joint it should only just cover the condyles of the femur. Two pieces of Canton flannel, from two and a half to three inches in width, double thickness, one long enough to nearly encircle the limb at the ankle, the other to encircle it at the upper third of the thigh, are

prepared at the same time. The pieces designed for the posterior splint are then thoroughly saturated in a mixture of plaster-of-Paris and water, taking care that the mixture is not too thick, and then smoothed out upon a board with the hand and applied smoothly to the limb. Then the two bands are prepared in the same way and applied around the upper and lower extremities to hold it in position. A dry roller bandage is then firmly applied over all, and the plaster allowed to set.

As soon as this is accomplished the bandage is removed and we have a firm posterior splint, secured above and below by transverse bands. Two other strips of a double thickness of Canton flannel, an inch wide, and long enough to overlap on the posterior surface of the splint, are saturated in a fresh mixture of plaster-of-Paris and then tightly applied above and below the patella, while the fragments are held in position by an assistant, in the same manner as adhesive straps are used for coaptation in this fracture. A dry roller bandage is then rapidly applied with the figure-of-eight turns over the strips. The surgeon then, with thumb and finger of each hand over these coaptation bands, forces the fragments into close approximation, and holds them there until the plaster has set. The bandage is then removed and a fresh one applied over the whole length of the limb. The dressing is then complete. Fig. 2 shows the splint with the bandage removed.

It is a good plan for the surgeon, before applying the coaptation bands, to see that the fragments can be easily approximated. In a number of cases I have found some difficulty in keeping the fragments in the same place, or in preventing them from tilting, there being a tendency for one to rise above the other. This can be overcome by mak-

ing pressure with the fingers over the line of fracture while waiting for the bands to harden.

This dressing differs essentially from

This overcomes one of the objections urged by Dr. Hamilton, the inefficiency of this dressing as a means of approximating the fragments. Another objec-



Fig. 1.

all others, in that the fragments are adjusted by the hands of the surgeon, and the "setting" of the plaster keeps them

tion which he makes, in regard to the weight of the splint, is not at all applicable, as patients have never complained

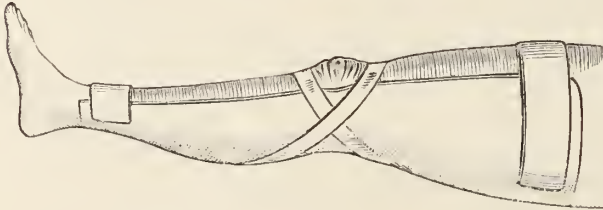


Fig. 2.

in the exact position in which they were held.

With this dressing the patient is not compelled to keep his bed, but may sit up or go about on crutches with but little inconvenience.

This apparatus, like all plaster-of-Paris splints, should be applied directly against the skin, care being taken, however, to remove the hair, or else smear the limb with vaseline or oil.

The condition of the fragments can now be examined at any time by simply removing the bandage, and, in case any separation has taken place in consequence of the shrinkage of the limb, it can be corrected by removing the coaptation bands and applying new ones; care should be taken, if this becomes necessary, which is seldom the case, to moisten the posterior splint in order to insure the adherence of the new pieces.

of this, and I doubt very much if it weighs any more than the apparatus he recommends.

Pressure sores have never been produced in my experience, nor have the patients ever complained of any pain caused by undue tightness of the dressing. In fact, constriction of the limb by the splint, bands, or bandages, so as to interfere with the circulation, cannot occur, even in inexperienced hands. In this respect it is safer than the plaster-of-Paris bandage which Hamilton so justly condemns.

In order to prevent a rough edge at the upper and lower extremities of the splint, it is advisable to fold them over about half an inch, thus bringing a perfectly smooth edge in contact with the soft parts.

This dressing should be left on for some six to eight weeks. The majority

of patients rarely have any appreciable separation of the fragments at the end of [the treatment, but, as the union is generally ligamentous, a certain amount



Fig. 3.

of separation will take place in time, as in all cases where there is not bony union.

A case that I treated ten years ago by this method came under my notice again a few weeks ago; the fragments which after the treatment were almost in direct contact, I found had only separated a little more than half an inch.

Two cases treated by this apparatus at St. Vincent's Hospital resulted in bony union. The first case, that of a man about forty years of age, was treated for a transverse fracture of the right patella. After the apparatus was removed, no separation or motion of the fragments could be detected. He remained in the hospital about three months. Six weeks after he left he was brought back with a severe injury of the head, from which he died. The patella was removed, and was found to have united by bone. The specimen, which I show the society, has been carefully examined, by section, by Professor W. H. Welch, of the Bellevue Hospital Medical College, and he states that it shows true bony union. The line of

fracture is slightly oblique from above downward and outward. The lower fragment is somewhat tilted, and overlaps the upper a little; it is also dis



Fig. 4.

placed outward one quarter of an inch. This interesting specimen belongs to the late Professor James R. Wood's collection in the Bellevue Hospital Museum.

In the second case, treated by Professor F. S. Dennis, although the patient was eighty-six years of age, no separation or movement of the fragments could be detected when he left the hospital.

In comparing this method with the one of wiring the patella in simple fractures, under antiseptic precautions, which has lately come into vogue, I am inclined to give the preference to the one just described, or to any other form of dressing which results in close ligamentous union. The patient is not submitted to a surgical operation, which may endanger his life or the usefulness of his knee joint; for, with the utmost care in antiseptic measures, there is still the possibility of serious complications.

Conservative Treatment of Compound Fractures.

By resection of the injured ends of the bones and wiring together of the fragments very good results have been obtained in cases where amputation would have been formerly considered to be indicated. For instance, in the *Brit. Med. Jour.*, Mr. Wright relates a case of resection of the humerus and wiring in a recent compound fracture. There was a large lacerated wound nearly severing the arm, but leaving the skin, vessels, and nerves on the inner side intact. The periosteum was torn off a part of the humerus, the forearm was also fractured. The base ends of the humerus were removed, and two silver sutures inserted. Good union and a nearly perfect limb resulted.—*Med. & Surg. Reporter.*

Clinical Report of a Unique Case of Strangulated Hernia.

Dr. G. GLANVILLE RUSK, (*Med. Med. Journal.*)

On invitation of Professor Ellis, I visited a gentleman who was supposed to be suffering from strangulated hernia. Three days prior to my visit the patient had attempted to lift a heavy piece of machinery, but was unable to do so, owing to a protrusion from the right inguinal canal, accompanied by a "sickening pain." His physician saw him right early, and reduced by taxis the offending mass to the very great relief of the patient. On the following day he reported himself well, and in a jocose manner expressed a doubt as to the accuracy of his physician's diagnosis. Under protest from his adviser he took four doses of a drastic purgative, and strange to relate it was retained by the stomach, but had no effect on the intestinal tract at this time. On the morning of the third day the patient

complained of indisposition with slight nausea, unaccompanied by pain. At the time of my visit, which was late on the evening of the same day, the patient was nauseated, void of pain, with pulse characteristic of serious abdominal trouble. On examination of the inguinal regions I discovered an undescended testicle lodged in the left inguinal canal. In the opposite canal, where the protrusion had primarily occurred, I was unable to detect the slightest evidence of an existing hernia. Continuing my search, I found the femoral canals normal, no spasmodic or organic stricture in the rectum. The presumption in the case was that the primary trouble had been effectually reduced by Professor Ellis, his physician. I was unable on the instant to unravel the puzzle before me; the symptoms, according to my experience, were not sufficiently pronounced for a recent case of strangulated hernia. The query in my mind was, were the symptoms in the case the result of intestinal invagination, or due to the accumulation of fæces, causing an obstruction in the bowel, or were they from a failure to completely reduce the primary hernia. Owing to the obscurity of diagnosis, I determined to delay operating till early morning, at which time I intended to seek for the trouble in the suspected canal, and if I should fail to find it, then establish an artificial anus at some eligible point in the abdominal wall. The patient was ordered an enema of hydrate of chloral to produce relaxation of the intestinal tube and one-twelfth of a grain of calomel every hour to allay nausea. We were at his bedside early in the morning, and were informed by his wife that he had slept well and retained nourishment. Whilst I was pressing in a mechanical manner over the right inguinal canal, he was

suddenly seized with nausea, which was followed by a copious vomiting of stercoraceous matter. He was immediately placed on the operating table, and the cause of his precarious condition sought for. It was found to have been the constriction of a small knuckle of intestine grasped within the internal abdominal ring. The constriction was divided and the imprisoned intestine freed. Collapse seemed imminent, but stimulants and artificial warmth restored the vital powers. Vomiting ceased, and in a few hours an alvine evacuation, which had not occurred for several days previous to his present illness, relieved his mind as well as his body. At this juncture I transferred the care of the patient to Professor Ellis, who informed me on the following morning that his patient was doing admirably well, and immediate union of the wound anticipated. Unfortunately hypercatharsis ensued some thirty-six hours consecutive to operating, to which the patient rapidly succumbed, dying on the sixth day of his illness. I would draw attention in this case to the absence of all positive symptoms indicative of strangulated hernia, and we would learn from it not to delay operating even when the symptoms are most obscure.

New Operation for the Radical Cure of Hernia.

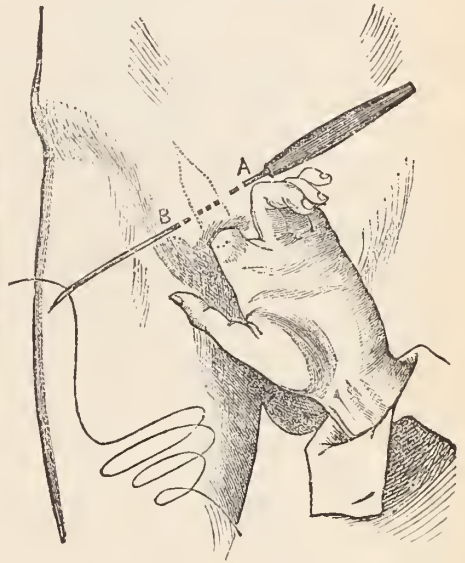
Dr. N. T. FITZGERALD, F. R. C. S. I., speaks as follows: Impressed with the manifest failure of Wutzer's, and the limited success of Wood's plans, some years ago I schemed out an operation, of which the following is a modification, and which I have performed a large number of times.

The only instrument employed is a long stout needle similar to those used in perineal operations, but the hank is

longer and the point less curved. Sometimes I suggest, though I do not use it myself, a long needle without a handle, with an eye point at each end; the employment of which, at one stage of the operation, avoids what appears to be an awkward movement of the hands, and enables the operator to pass his stitches more easily than perhaps he otherwise would do.

The patient having had his bowels cleared by a purgative the evening be-

Fig. 13.

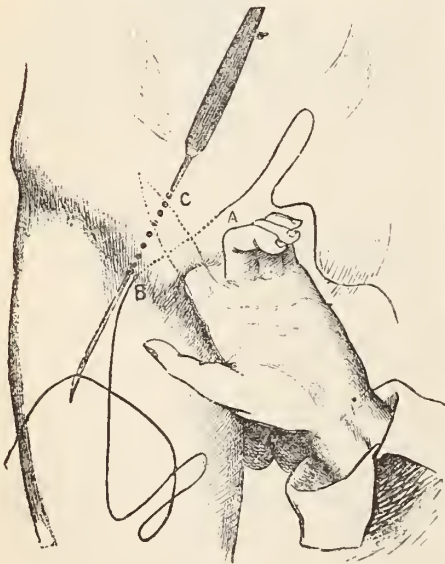


Figs. 13, 14, 15 and 16 show the four positions in which the needle is inserted in the course of the operation. Throughout, *a* represents the spot where the needle is first inserted; *b*, the point where the first stitch comes out; *c*, point where the second suture is inserted, *d* spot where needle first enters for third stitch.

fore, and an enema in the morning, is placed on his back, with his hips raised on a pillow. An anæsthetic is administered, and as soon as complete muscular relaxation is effected, the hernia, external ring, and neighboring parts, should be carefully examined; notice being taken as to the size of the ring, and whether the rupture is oblique or direct. The hernia, if descended,

should be reduced, and the index finger of the left hand, pulp uppermost, carrying the scrotal integument in front of it, pushed through the external ring into the inguinal canal. If the opening be large, two fingers must be introduced; but above all, care should be taken that the hernia, once reduced, be prevented from slipping down. It may be necessary to obtain the aid of a skilled assistant and to effect this, by pressing on the abdominal wall over the internal ring. The needle is then inserted about two inches from the inner column of the external abdominal ring (*a*), and about half an inch above the pubes, pushed downwards and outwards, keeping the point of the needle deep and quite close to the abdominal muscles, till it meets the internal pillar fully a quarter of an inch from its free edge; this it pierces, and also picking up the conjoined tendon, is carried over the forefinger, lying in the canal, and guarding the

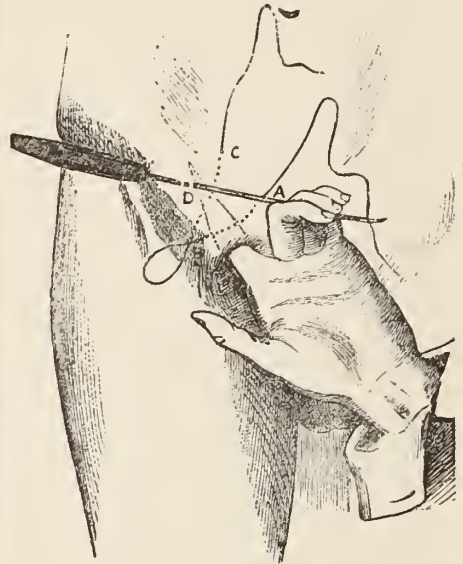
Fig. 14.



spermatic cords and vessels, till it reaches the external pillar; under this boundary

of the ring it passes for a quarter of an inch, when it is thrust into Poupart's ligament, till, traveling under the skin

Fig. 15.



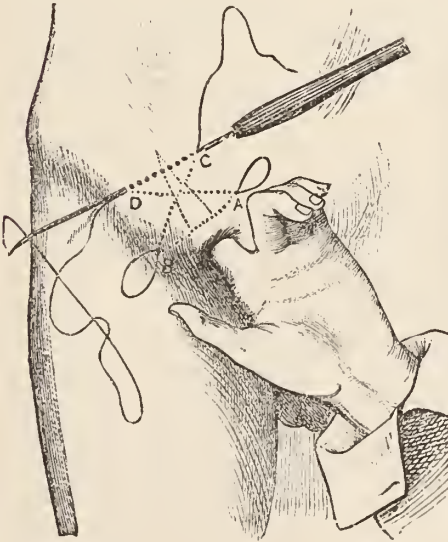
and superficial fascia, it comes to the surface at the same distance from the external pillar as its point of entrance was from the inner column (*b*).

By this means a substantial hold is taken of both pillars, which, before they are pierced are tilted forwards, by the point of the forefinger from underneath, so as to avoid wounding the structure beneath. When once the digit is in the canal, and the operation commenced, it should not be removed till the stitches are finally pulled together.

The next step is to thread the needle (at *b*) with a piece of pure gold wire from fifteen to eighteen inches in length, and sufficiently stout to withstand a tolerable strain; the needle is then withdrawn, and the wire left in its track. The second stitch is made by inserting the needle (at *c*) about two inches from the inner pillar of the external abdominal ring, and an inch higher up than

the first stitch. This time it is made to pierce the integument, subcutaneous tissue, and conjoined tendon; then it is passed over the forefinger and Poupart's ligament (or the external pillar) to emerge at (*b*), the point where it came to the surface, in passing the first stitch; the needle is then wired, with the end hanging out there, and withdrawn as before. In passing the third stitch, a little more difficulty is occasionally experienced, and to do it neatly requires a certain amount of dexterity and some manipulatory skill. The long needle sharp at either end as described, would render the operation less troublesome. If the same needle be used by the surgeon all through, the right hand and arm must be swept round the lower part of the abdomen, and the point of the instrument introduced through the skin and external pillar at a spot (*d*) about an

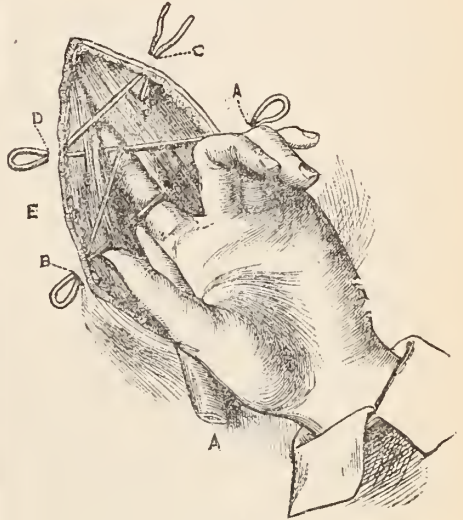
Fig. 16.



inch from (*b*) and allowing for the obliquity of the canal, opposite the puncture where the needle entered in commencing the second suture (*c*). Having perforated Poupart's ligament, it now

passes over the forefinger across the ring, over the internal pillar, and through the skin at (*a*). If the long needle be used, its course is naturally reversed; entering at (*a*), it is thrust

Fig. 17.



under the external pillar at the opening (*d*); the needle, whichever description is employed, is then threaded (at *a*), and the gold wire drawn through as before. A loop of wire is thus left projecting at (*a*) and (*b*), and the ends stand out at (*c*) and (*d*); by now passing the needle subcutaneously from (*c*) to (*d*) over the pillars and upper portion of the ring, the end of the wire protruding at the puncture (*d*) can be drawn out (at *c*), so that the two extremities are left projecting at the same orifice. Traction is next carefully made on the wire, sufficient to draw the pillars of the ring together, without cutting or so squeezing them as to strangle the tendinous structures, care being also taken not to kink the loops. The ends are then securely twisted, and then cut close to the skin, and allowed to fall back under the integument. A piece of lint as a protective pad is placed over the groin, and

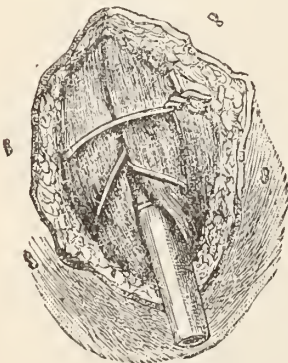
held in position by a spica-bandage and the patient is put to bed. In a few days, the little tenderness occasioned by the puncture will have passed off, and a light easy-fitting truss may be applied and worn for a month or so.

I have depicted the operation as it is performed on the right side, the needle being worked by the right hand; the same description will suffice for stitching the other side—only, of course, substituting outer for inner, and so forth.

When the size of the external abdominal ring, in an oblique hernia, or the split in the tendinous structures in a direct hernia is unusually large, it may occasionally be necessary to apply a second crucial stitch, above the first—making as it were “a double gate.” This is performed in exactly the same manner, except that the stitches are made deeper, and not so far apart from one another as when only a single suture is used.

Sometimes, as the loops are withdrawn, they pucker the skin, or cause a certain amount of invagination, especially when the needle does not make its entrance

Fig. 18.



and exit through exactly the same opening. This can be remedied by picking up the skin between the finger and thumb, and giving it a kind of shake or tremulous motion. If this be not sufficient a tenotome may be intro-

duced to disengage the wire. The sutures; being of pure gold and perfectly unirritating, are left in permanently, and form a perpetual barrier to the descent of the hernia, stimulating, to some extent, the natural intercolumnar bands.

Such is the operation: and I may now make mention of some points that

Fig. 19.

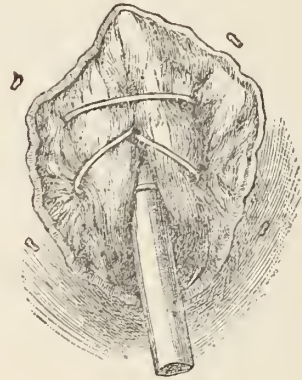


Fig. 17 shows the position in which the wire should appear, after the last stitch, and previous to bringing the walls together; *e*, outer skin; *ff*, coat of the abdomen. Fig. 18. shows how the parts should appear when the loops are tightened. Fig. 19 the same, showing the puckering of subcutaneous fasciæ and tissues.

are essential to its success. The left forefinger must be very carefully kept in the canal the whole time, so as to avoid injury to the intestine and peritoneum on the one hand and the spermatic cord and its vessels on the other. Again, in introducing the sutures, it is of the utmost importance to include as much as possible of the subcutaneous structures, so as these may form a pad, which, while it assists in closing the canal from the outside (not by a plug within, as in the other operations), also prevents the sutures from cutting through the tendinous structures.

To do this the needle must be entered well away from the pillars of the ring, and the first time should be passed deeply, close to the abdominal muscles,

until the edge of the ring is picked up. The second time the needle should be passed superficially, and close to the skin. When the ring is large, it is necessary to be sure and put in enough sutures, whilst care must be taken not to close the ring too much, or the circulation in the spermatic cord may be interfered with, and atrophy of the testicles or varicocele may result.

I may mention that a former surgeon to our institution witnessed many of my early operations and was so impressed with their success that he, (having a large direct hernia) wanted me to operate on himself; however I declined, as a truss kept it up easily without inconvenience, and also as he was a man advanced in years.

Of course, I, like most others loose sight of my patients after a time; but I never occasioned a death through the operation. In fact, it gives rise to so little irritation or constitutional disturbance, that it is perfectly possible, though perhaps not advisable, for the patient to leave his bed two or three days after the operation.—*Brit. Med. Jour.*

A Case of Congenital Goitre Cured by a single Application of Mercuric Biniodide.

DR. J. C. WORTHINGTON, (*Med. Record*): I first saw the patient, S. D. B—, a well-developed male infant, July 26, 1883, six hours after birth. The mother, a healthy woman, had had a slight goitre for over two years, the swelling having first been noticed during her previous pregnancy. The family was much alarmed at the appearance of the child's throat.

On examination I found a marked goitrous swelling, soft, but not fluctuating, on the right of the trachea. The tumor was as large as a hen's egg. I advised that nothing should be done

until the child was three months old, when I would attempt to cure it by an external application, which I thought would not be advisable before that time.

I did not see the child again until November 12th, when it was brought to me by the mother for the treatment that I had promised. I found him a well-nourished baby, healthy in every respect except the deforming tumor on the right side of his throat, which had increased with his growth, and now filled the whole space between the chin and sternum on that side. His mother stated that the tumor now interfered with the child's breathing when he lay on his back. The flattening of the crown of the head, mentioned by Aitken, was now well marked. I confess it was with some misgivings that I prescribed for the child the treatment mentioned in Aitken's "Practice of Medicine," as having been attended with such wonderful success in India. I ordered the following: \mathcal{R} . Mercuric biniodide, gr. x.; lard, \mathfrak{z} j.; M. and S. Apply as directed. I directed as follows: At ten o'clock A. M., on a bright sunny day, rub well into the skin over the whole tumor a lump of the ointment of the size of a filbert. Then hold the child, with the tumor exposed to the sun, at a *closed* window, as the weather was cool, for half an hour, then for an hour in front of a fire. At 2 P. M. of the same day repeat the application, and expose to the sun and fire as before.

On November 28th the child's mother brought him to me—cured. She stated that the treatment had been carried out as directed on the 17th, except that the exposure to the sun in the afternoon had been for less than thirty minutes, on account of its being so painful to the little patient. That he had had much pain and cried a great

deal the following night ; that the skin had become very red and had peeled off wherever the ointment had touched it ; that she thought the next day the swelling seemed smaller, and on the 20th—three days after the application—the tumor was almost gone, and had grown smaller ever since until it entirely disappeared. When seen November 28th—eleven days after the application—there was no evidence of cutaneous irritation, and the thyroid gland was just perceptible to the touch, as in a normally formed infant. The cure was complete. No salivation or other indication of constitutional effects of mercury occurred.

A New Method of Amputating.

Dr. HENRY C. KERBER. To obtain primary union in wounds it is absolutely necessary that no spaces or cavities be formed, and that the parts tolerate a compressing dressing without danger of necrosis.

Amputation wounds do not come up to these requirements, as the muscles retract in different degrees, according to the distance between the cut surface and the origin of the muscle, leaving spaces which are not closed up when the flaps are united, but afterwards fill with blood and the secretions of the wound ; nor can pressure be applied to bring the parts into apposition, as it would surely cause necrosis of the flaps and often of the margin of the bone ; besides this, especially in old, debilitated or anæmic patients, there is a great risk of getting necrosis of the edges of the flaps in all amputations except the circular-flap method.

To obviate and remedy these defects, *i. e.*, to place the wound in a condition most favorable for attaining primary union, Neuber has devised and put into

practice a new method of amputating, which consists in making shorter skin flaps, covering the margin of the bone with flaps of periosteum, sewing the muscles together, bringing up the retracted muscles to the level of the wound and keeping them there by means of sutures.

By this method the end of the bone is covered by three layers of tissue, united by three sets of sutures : first, the periosteum is sewed together over the bone ; over this the muscles and then the skin-flaps. This prevents the formation of cavities, it forms the soft parts into a cushion between the bone and the flaps, thereby preventing the necrosis of either ; permits the use of a compressing dressing, which prevents the accumulation of secretions, and lastly the flaps being short are better nourished and necrosis of the margin need not be feared.

In the following I shall explain the mode of procedure in an amputation of the thigh :

1. After getting the transverse diameter of the thigh, three points (*a*, *b*, *c*) are marked on each side. *a* is the point at which the bone is to be divided ; *c* is placed one-half the length of the diameter below *a*, and is the summit of the convexity of each of the side-flaps ; *b* is where the muscles are afterwards cut through, and is one-third the diameter below *a*.
2. These points being marked on both sides of the thigh, two lateral slightly convex skin-flaps are made, beginning on the anterior surface and ending posteriorly, the summit of the convex at *c*, the base of the flaps on the line of *b*. The skin and subcutaneous tissue is dissected back to *b*, and the flap turned back.
3. Circular cut through muscles and periosteum at *b*, close to the bases of the everted flaps.
4. The periosteum is scraped

back from *b* to *a*. If necessary to facilitate this, an incision may be made through the muscles and periosteum on the posterior surface of the bone. If possible, the incision should be made at some intermuscular septum. 5. These musculo-periosteal flaps are held back and protected while the femur is sawed through at *a*. 6. Ligation of all bleeding points. Disinfection of the wound. 7. The periosteum is drawn over the end of the bone and sewed together. 8. The muscles and fascia of either side are drawn together over the periosteum, retained there and united by five or six sutures; before this a decalcined bone drain is placed in the back of the wound, leading up to the bone. 9. Flaps united. Re-disinfection of the wound with the corrosive sublimate solution (1:1000). Permanent dressing. This method of uniting the muscles over the bone does very well for amputations of the thigh, arm and the upper half of the forearm and leg, but for amputation of the lower half of leg and forearm the surface of cut bones and tendons is so great it does not admit of this procedure. In this case, after sewing the periosteum flaps, you pull down the retracted muscles, fasten them there, and thus equalize the surface of the wound to prevent the formation of cavities.

Excisions and Amputations in Tubercular Subjects.

Prof. OLLIER, in the *Lyon Med.*, thus sums up the conclusions drawn from his extensive practice in this class of affections:

1. Articular excisions performed on tuberculous subjects may be attended with durable success. They allow not only of a local cure being obtained, but also of those general accidents being eradicated which have their source in

the absorption of the products of articular tubercular disease.

2. The gravity of the tuberculosis is very variable. It may remain for a long time local, or what appears to be so, so slow is its progress, and so long does it continue unaccompanied by general phenomena. The question of soil (*terrain*) seems to exert a capital influence.

3. It is probable that, in the anatomical group of tubercular lesions, there may be pyogenic affections of different kinds. Histology has not as yet furnished us with the means of making these distinctions. Inoculation and a study of the tubercular microbe will probably allow of our soon establishing differences which at the present time we can only suspect.

4. Articular excisions in subjects who have presented all the anatomical and clinical signs of a tubercular affection have enabled us to obtain cures which have been maintained for fifteen years and more.

5 Amputations should be preferred to excisions in the grave forms of articular tuberculosis, especially in lesions of the lower extremities. We should have recourse to them when it is a matter of importance to suppress without delay a suppuration which threatens life.

6. In principle, amputations offer more shelter against secondary infections than excisions; but they never constitute a radical operation. The deep-seated, inaccessible ganglions, already invaded by the tuberculosis, subsist in the one case as in the other.

7 An excision followed by a complete local cure—that is to say, by the definitive cicatrization of the wound from the operation—does not expose more than amputation to secondary tubercular infection.

8 Hygiene and general medication

are of great importance in the modification of the soil in which tuberculosis may become developed. Local modifications may destroy the tubercular tissues, and transform them into stable cicatricial tissue—such modifications, moreover, taking place spontaneously in many subjects, and especially in children. Notwithstanding the inoculability of its products, tuberculosis cannot be assimilated to cancer, whether as regards its prognosis or therapeutical indications.—*Louisville Med. News.*

Adenoid Growths in the Pharynx.

The following are the conclusions arrived at by Dr. PESSON in a thesis presented to the Faculté de Médecine of Paris (*Journal de Médecine de Paris*): 1. In the upper part of the pharynx at the junction of the vault and the posterior wall, and between the orifices of the Eustachian tubes, there is an agglomeration of closed follicles which constitute (adopting the expression of Kölliker and Luschka) a true tonsil. 2. This gland is liable to hypertrophy like the tonsils, and then presents the appearance of a cluster of vegetations. These vegetations, already described by a number of writers, are seen usually during the first twenty years of life. Like the lymphatic tissue in general, their natural tendency is to atrophy. 3. These adenoid growths give rise to various troubles of respiration, phonation, and hearing. Children who suffer from their presence, breathe through the mouth and acquire thereby a stupid expression; they complain of frequent headaches, snore during sleep, and are sometimes awakened in the night by asthmatic attacks. The tone of the voice is muffled and faint, and the articulation of nasal words (in French) is difficult.

Hearing is often impaired through middle ear disease. These troubles, which often discourage the physician by their obstinacy, disappear spontaneously upon the removal of the third tonsil. At the same time the deformity of the thorax, described by Lambon and Robert, and attributed by them to hypertrophy of the tonsils, is observed. A careful study of the facts leads to the belief that this symptom is really due to the adenoid vegetations in the pharynx.

4. These growths often determine a chronic catarrh in this region, which is too often referred to a diathesis, but which, like all the other symptoms, can only be cured by treatment directed to the vegetations. 5. Observation leads also to the opinion that deaf-mutism depends in certain cases upon the presence of these adenoid vegetations. Consequently, an opportune diagnosis may lead to the prevention or even cure of deaf-mutism from such cause. 6. Hypertrophy of the third tonsil may be diagnosed by posterior rhinoscopy or by digital examination. 7. The treatment of these vegetations and of the symptoms dependent upon them consists essentially in the extirpation of the enlarged gland.—*Med. Record.*

Cause and Mechanism of Flat-foot.

The *Med. Times and Gaz.*, tells us that Dr. HERMANN VON MEYER, Professor of Anatomy in Zurich, after a careful examination of the normal and of the flat-foot, anatomical as well as clinical, comes to the following conclusions, which, as will be seen, are somewhat at variance with the generally accepted views: Flat-foot does not depend on destruction of the arch of the foot, but on the valgus position of the foot, and chiefly of the os calcis, with regard to the astragalus, together with, as a com-

plemental and secondary condition, version upwards and outwards of the fore part of the foot. The deformity is not due to relaxation of the plantar ligaments, but depends rather on exaggerated rotation inwards of the astragalus, and on subsequent changes in the conditions of the plantar bones, due to the atrophy resulting from mutual pressure. The present *brochure* ("Studien über den Mechanismus des Fusses," part 1, published at Jena) is the first of three in which the normal and pathological conditions of the foot are to be discussed. We shall look forward to the others with some interest; the second will deal with the normal mechanism of the foot, and the last will complete the subject by discussing the various forms of club-foot.—*Med. & Surg. Reporter.*

Cure of Abscesses of the Neck without Cicatrices.

Dr. QUINLAN recommends the passage through the abscess of a fine silver wire, and the ends tied outside, when it will act as a drain. This must be done before the pus reaches the surface, when it is, say half an inch from the external surface. No poulticing or stuping must be used, and when the abscess is evacuated a compress applied. The procedure has never failed in his hands.

A New Method of Tooth-drawing.

A small square of India-rubber, pierced with a central hole, is pushed over the tooth until the upper part of the root is reached. The rubber gradually contracts, pulls on the root, and the tooth is finally enucleated without causing any pain. Four or five days complete the operation, while very slight bleeding and slight swelling of the gum are the only inconveniences. This procedure is recommended by a dentist of Geneva.—*Ibid.*

A New Cure for Bunions.

To the New York Pathological Society (*New York Med. Jour.*), Dr. L. A. SAYRE presented some metatarsal bones which had been removed from either foot for bunion. The patient was a man about forty years of age, in whom the condition of the foot, which had existed for many years, gave rise to much difficulty in walking, and on two occasions had caused suppuration. The metatarsal bone was removed by means of a bone forceps through an incision on the dorsum of the foot. The incision was closed with black silk, the wounds united in less than two weeks, and the patient was now able to get about with comfort and had a movable joint.—*Ibid.*

Painless Paracentesis.

Since general etherization is sometimes interdicted owing to some heart trouble, etc., and since the ether-spray is disagreeable, owing to the odor of ether, the following, not very new, but practical suggestion of Dr. F. P. STAPES in the *Brit. Med. Jour.*, is worthy of note. He applies a mixture of salt and ice for about twenty minutes before the operation. This completely destroys all sensibility in the part.—*Ibid.*

VENEREAL DISEASES.

The Radical Cure of Hydrocele.

Dr. JOHN A. WYETH (*Annals of Anatomy and Surgery*): The operation of injecting an irritating liquid, such as tincture of iodine, pure or diluted with water, or port wine and water, alcohol, etc., into the sac of a hydrocele which has been previously more or less completely emptied, is, as is well known,

highly recommended by most text-books on surgery as efficient and harmless. Nevertheless, fatal results have followed this procedure, and dangerous and extensive sloughing (so easily are the tissues of the scrotum infiltrated) has followed the simple evacuation of the contents of the sac when no injection has been made. Sir Astley Cooper reports two fatal cases after injection; Gross gives another case; still another mention is made of fatal results in "Holmes' Surgery," and I shall report a case further on.

Every surgeon of experience in genito-urinary diseases knows that the scrotal tissues are easily infiltrated. I have seen extensive œdema of the entire scrotum and penis follow a few hours after an explanatory puncture of a hydrocele made with a small-sized hypodermic needle, the fluid oozing out of the puncture in the tunica vaginalis and into the layers of the scrotum. Dr. Davey reports an instance in which extensive sloughing occurred, and even death has resulted from this simple puncture.

The following case I desire to record here. M. S., aged forty-three, Germany, cigar-maker; family history good. Patient says he had syphilis "a good many years ago;" gonorrhœa several times, the last attack three years ago; had sore on penis at the same time; no stricture; no pain. Three months prior to June 27, 1883, he noticed that the scrotum began to swell at the lowest portion on the left side, which continued to increase in size to date before given. The tumor measured six inches long, and had a transverse circumference of about ten inches. Urine contains a trace of pus and albumen, considered to be the *liquor puris*.

On June 27, at the request of a surgical friend, who, being compelled to absent himself from the city, had in-

sisted that I should treat this case by injecting the sac with iodine, I did this operation. The method advised by Van Buren and Keyes was followed. The fluid, measuring about eight ounces, was drawn off with a medium-sized aspirator needle, and one-half the quantity of tincture of iodine was thrown in and immediately drawn back into the aspirator. A small quantity, estimated at about one-half an ounce, would not return through the needle, and was allowed to remain in and trickle out through the trocar wound.

Pallor and other evidences of slight shock followed the operation, which was done at 10 A. M. At 4 P. M. patient had a chill lasting fifteen minutes, followed by delirium and a rapid pulse scarcely perceptible at the wrist. Half an ounce of whisky was given *per orem*. By this time a dark blue spot, insensible to the touch and as large as a silver dollar, had made its appearance on the scrotum, extending to the median raphe. A free incision was now made into the tunica vaginalis through this spot, the cavity was washed out, and the scrotum covered with a poultice. The iodine which was left in was washed out, together with a few small brown clots, which I took to be coagulated hydrocele fluid, stained with iodine. Urine passed six hours after operation, was colored with iodine, and the breath had a peculiar odor. Temperature on this day was, at 3.40 P. M., 101°; 4.20 P. M., 102°; 8 P. M., 99.8°; 10 P. M., 99.7°. Quantity of urine in first twenty-four hours, $\frac{5}{8}$ xv.

June 28.—Temperature from 1 to 11 A. M., 99°. At 2 A. M. passed $\frac{5}{8}$ v. dark urine. Slight vomiting, and again at 9 A. M., after taking milk. Cellulitis of scrotum, penis, and contiguous skin of abdomen. 1 P. M., temperature, 101°. 4 P. M., temperature, 102°; urine, $\frac{5}{8}$ ixss. 29.—Sloughing; renewed poul-

tices ; urine, $\frac{3}{4}$ ixss. 30.—Ditto ; urine, $\frac{3}{4}$ xiv.

July 1.—Patient more comfortable ; treatment continued ; urine, $\frac{3}{4}$ xii. 2.—Temperature, 100 to 101°. 4.—Patient was seized with a severe diarrhœa, followed by eleven evacuations, which greatly prostrated him before they could be checked with quinine, bismuth, and opium ; urine, $\frac{3}{4}$ xv.

July 5.—At 6 A. M., while attempting to sit up in bed and lift himself by his hands he cried out as if in great pain, and fell back instantly dead.

Squamous Syphilide.

For the local treatment of squamous syphilides, Prof. GROSS recommends the following elegant prescription : \mathcal{R} . Hydrarg. bichlorid., gr. iv.; tinct. benzoini, $\frac{3}{4}$ ss.; aquæ cologniensis, $\frac{3}{4}$ j; aquæ rosæ, $\frac{3}{4}$ ivss. M. Sig. Apply with sponge, and hold in contact with the skin for twenty minutes.—*Col. and Clin. Record*.

DISEASES OF THE SKIN.

Scabies.

In a clinical Lecture by Dr. W. H. SEELYE, published in *Med. & Surg. Reporter*, the Dr. gives the following treatment for this malady : The rational treatment, which consists in removing the cause of the trouble, is perfectly applicable here. This may be done in many ways, for there are many means of destroying the insect. Sulphur, however, is the classical remedy for this disease ; and it was used in the earliest times, and is probably to this day the most universally employed for this purpose. Its action on the skin may be obtained in various ways, either by means of sulphur baths, by fumigations,

or by ointments. Perhaps I can do no better than to describe to you the way the treatment is carried out on a large scale in the hospitals of Paris, and particularly in the hospital of Saint Louis, where a special department is devoted to the treatment of skin diseases. Here they have a large apartment, into which every morning the patient is sent naked. The first thing each one does is to thoroughly soap himself with soft soap, and then each soaps his neighbor over those parts which he himself cannot reach. This is done in order to soften the epidermis. The patient then goes into another apartment where there is a hot bath, into which he gets, and lies there from twenty minutes to half an hour. He then dries himself and goes into another room, in the middle of which stands a large tub filled with an ointment which consists of carbonate of potash one part, to flowers of sulphur three parts, and lard eight parts. Each patient now rubs this ointment freely into all the crevices of the skin, and then dresses himself again in his own clothing. This can be safely done, for the process is so thorough that the ointment which is left on the skin effectually destroys all the insects which may be present in the clothing. After repeating this process from three to five times, the most obstinate cases of scabies are cured. There is no better plan of treatment than this to follow, even in private practice, for it can be carried out at the patient's home almost as conveniently as in a hospital. This process of softening the epidermis before applying the ointment is very important, in order to thoroughly destroy the vesicles, and the eggs, and the immature animals, which are concealed in them. Another important point to remember is to apply the ointment to the whole surface of the body, and not simply to

the parts which seem to be affected. For this is a migratory animal, and without this precaution you may fail to destroy some which have wandered to distant parts. The head and neck are the only parts of the body which can be spared, for it is extremely rare to find that they have invaded these regions.

Carbolic acid, creasote, iodide of potassium, and the salts of mercury, have also been successfully used in this disease, for they are all destructive to the lower forms of both animal and vegetable life.

A peculiar fact in the history of scabies is that the same theories have been held with regard to the significance of the acarus, as have more recently been held by investigators with regard to those low organisms which are now supposed to enter into the circulation, and to produce the various forms of infectious fevers. That is, it has been maintained by some that the acarus is not the cause, but only one of the products of the disease. It is, they said, an example of spontaneous generation, for the fluids of the body are in just that condition which is favorable to the development of these animals within the vesicles. And so they are only an incident, and have no share in the production of the disease. On the other hand, the idea prevailed with many in the sixteenth and seventeenth centuries, that the psora was the basis not only of the itch, but of all diseases. It was for instance supposed that this animal got into the bladder, and so caused diseases of the kidneys, or by getting into the joints it caused gout: and so it was considered to be the universal cause of all maladies. The same notion prevailed for a long time in regard to those spores which cause prurigo favosa, and herpes circinatus. And the view taken by Mr. Erichsen until recently in regard to pru-

rigo favosa, is that it is a disease of inflammatory origin in which spores are found as a complication, and not as a true cause of the disease. In like manner, many now maintain that the bacteria which are found are not the cause, but only an incident in the development of surgical fevers, diphtheria, and the like.

Sulphide of Calcium for Scabies.

Dr. DOLAN, (*Brit. Medical Journal*), says that sulphide of calcium, known in Poorlaw service as golden lotion, is more effectual in the treatment of itch than conventional sulphur ointment. It may be made by the following formula: Flour or sulphur, 100 parts; quick lime 200 parts; water, 1000 parts. Boil the whole for some time, stirring occasionally until the substance become incorporated, allowing the liquid to cool, and decant into hermetically sealed bottles. It should not be made in a metal vessel.

It is applied as follows: The patient is first put into a warm bath; he is then painted with a brush dipped in the solution and placed in bed, either in blankets, or a flannel nightgown. After a short time, owing to the deposit of sulphur, the patient's body is almost the color of a guinea. The beneficial effects are speedily manifested; the itching ceases, and, as a rule, in simple cases, after another warm bath, the patient may be discharged cured.

Hair Tonic.

Prof. GROSS suggests the following: R. Tinct. cantharidis, 3 iss.; tinct. capsici, gtt. xx.; glycerini, 3 ss.; aquæ cologniensis, q. s. ad., 5 vj. M. Sig. "Hair Tonic."—*Coll. & Clin. Record*.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Treatment of Fractured Patella.

Dr. JALAGUIER, in an eminently French, but very interesting, paper in the March and April numbers of the *Archives Generales de Medicine*, discusses the "new methods" of treating fractured patella—aspiration of the effused blood or other products, and suture of the fragments after opening the joint—the former operations being "*une etape de transition*" between the old method, which respected the joint at any cost, and the new one which lays it freely open. The author gives summaries of all recorded cases and traces the histories of the two operations. It is curious to note that the line of argument against aspiration of the joint when this operation was first introduced, is very similar to that used now a-days against the infinitely more serious one of free incision. For aspiration met with a very adverse criticism at the hands of the Societe de Chirurgie of Paris, in 1872, when M. DuBreuil related a case in which he had practiced this operation, which was followed by formidable complications and ultimately proved fatal. It had long been recognized by surgeons that effusion, either sanguinous or not into the knee-joint after fracture of the patella was the chief cause which interfered with the approximation of the fragments; no wonder, however, that after such an expression of opinion by the Surgical Society, the operation languished, and, indeed, never became popular in France. In England and Germany, however, it has been practiced with success, and by many surgeons is even now considered the best operation in order to bring about coaptation of the fragments. The graver operation of opening the joint

is legitimately a subject on which there is room for difference of opinion. Many surgeons reject the operation because satisfactory results can be obtained without it. Such a position is absolutely unassailable, and Verneuil thinks it unjustifiable to run grave risks by opening the knee while such results can be obtained. Our author discusses all the *pros* and *cons*, and concludes his instructive paper thus: Without wishing to prejudice the fate which may be in store for this new operation, and without forgetting the remarkable success which Lister and others have obtained, we must recognize in recent simple fractures of the patella, that suture of the fragments after the free opening of the joint is a method so hazardous that it ought not to be had resource to in the first instance. On the contrary in certain old fractures, with a view to remedy severe functional disturbance, it may be tried, but even then the operation is not free from dangers. The author refers also to the influence of atrophy of the quadriceps muscle as a factor in the pathology of loss of use of the limb; and he remarks on the absence of any attempt to prevent or treat it surgically.—*Med. Med. Jour.*

The Plaster Posterior Splint in the Treatment of Fractures of the Leg, with its Practical Application.

The afternoon session, at Huntington Hall, in the Institute of Technology, was opened with a paper on this subject, by Dr. GEORGE W. GAY, of Boston, who gave a demonstration of the measures alluded to in the paper. The desirable features in a leg splint he thought were best embodied in the plaster posterior splint which had for many years been in constant use in the Boston City Hospital. It was made of sheet wadding, coarse muslin, or crino-

line, and plaster of Paris, and was applied as follows : The leg was washed and dried, and enveloped in the wadding, which had been torn into strips about four inches wide, sewn together, and made into rolls like an ordinary bandage. Enough should be used to protect the bony processes and the tendo Achillis from pressure. A single layer of the gauze, large enough to extend from the toes to above the knee, was to be placed beneath the limb, closely wrapped about it, and cut so as to surround it completely, with the exception of a space about an inch wide on the anterior aspect. This piece served as a pattern by which the other layers, six or eight in all, were to be made. The muslin was to be slashed on each side opposite the point of the heel, to allow the foot-piece to be brought to a right angle without forming clumsy folds. Other slashes might be required to make the dressing fit snugly and smoothly, and to prevent wrinkles. Fresh plaster of Paris, mixed with warm water to the consistence of cream, was now to be thoroughly rubbed into each layer of the gauze, and the whole applied to the limb at once, molded closely and carefully to the inequalities, and firmly secured with a common bandage. The fragments were to be held in their proper place until the splint had become sufficiently firm to prevent displacement, which, with good plaster, would not be over fifteen or twenty minutes. In some cases this might be accomplished by means of sand-bags or pillows. In a few hours the outer bandage could be removed and the wadding cut open with scissors. The appliance was then complete, and could be worn with comfort for several weeks.

Particular attention was called to a few points in adjusting this plaster case.

The greatest pains should be taken to hold the fragments in their proper position until the plaster had set ; otherwise they might get displaced, when a new bandage would be required, or a deformity would be the result. The foot should be placed at nearly a right angle to the leg, especially if the fracture was at or near the ankle joint. Little padding was required except about the heel and malleoli. Care should be taken that no wrinkles or folds were allowed to press upon the limb. The splint should reach to the metatarso-phalangeal articulation below, and, as a rule, should extend above the knee, particularly in children, to prevent twisting of the fragments in their long axis, or, in other words, to hold the foot in its natural relation to the knee. It should embrace about three-fourths of the circumference of the limb, in order to give the desired support, and retain itself in position. Although especially adapted for simple fracture of the tibia, or of the tibia and fibula, unattended with injury to the soft parts, the splint might also be used for compound fractures, if the soft tissues were not too extensively injured, and if the wounds were so situated that they could be exposed through holes in the splint. Strips of hoop-iron were used in these cases to strengthen the splint.

Contrary to the teaching of some authorities, the reader believed in the frequent examination of broken limbs until the fragments were so closely joined that they could not be displaced easily. Broken ribs and clavicles, though necessarily subjected to constant motion, almost always united well. So did fractures complicated with delirium tremens or excessive restlessness or insubordination, by which the limbs often sustained great violence.

The position of the fragments incased

in the apparatus under consideration could frequently be determined by simply sliding the fingers along inside the splint without removing it. But to examine the parts thoroughly the case must be sprung open forcibly and the leg carefully lifted out.

The reader wished it to be distinctly understood that this dressing was not adapted to all varieties of fractures of the leg. For example, some cases of Pott's fracture, accompanied by marked inversion of the foot, requiring strong pressure to restore it to its proper position and keep it there, could perhaps be better treated by other methods. So likewise, might cases of oblique fracture of the tibia, with great overriding of the fragments. Soft parts that had been severely contused should not be subjected to pressure until all danger of ulceration and sloughing had passed. The presence of blebs or blisters, however, did not necessarily preclude the use of this dressing, as they might often be treated through an opening in the plaster.

The reader thought enthusiasm got the better of judgment when patients were allowed to move about on crutches soon after an immovable dressing had been applied to a recent fracture. In cases of Pott's fracture he would not allow the patient to bear his full weight on the foot for months, as displacement and deformity were prone to return.—*N. Y. Med. Jour.*

How Liston Reduced an Obstinate Dislocation.

In an address published in the *Edinburgh Med. Jour.*, Dr. ALEXANDER KEILLER relates the following amusing anecdote of the great Liston:

"We have already referred to his powerful build, the mere appearance of which was more than enough to make

even the biggest bruiser hesitate before encountering Liston's fisticuff, in either the noble or ignoble art of self-defence, and in thinking of our present hero as an object of physical power, we shall here cite the particulars of a case which went to exhibit his force of skillfully applied will as well as muscular dexterity. A strong fellow of a carter was one day admitted into the old Infirmary in consequence of an overlooked dislocation of the shoulder-joint, which puzzled the surgeons on duty to reduce, especially as their repeated attempts at reduction were greatly frustrated by the too obviously determined resolution of the obstreperous and unusually resisting monster of strength, whose unmanageable muscularity Liston was afterwards induced to alone cope with and subdue, and which created a scene more akin to that of bull-baiting than to human surgery.

"We were fortunate enough to witness this new trait of tact as well as of strength, and on the still unsubdued and as yet unrelieved animal being again led into the enclosed ring, he was immediately pounced upon by the herculean Liston, who at once firmly grasped the obviously fixed, because immovably dislocated extremity, and which he continued to powerfully pull and twist, and then to violently manipulate, under a perfect storm of the most dreadful oaths and personal kicks, even against the region of parts by no means well or safely protected. Liston, however, was quite equal to the awkward situation, and as every kick with dangerous force was launched at him in front, he knew his anatomy too well not to swing round so as to receive them on amply cushioned parts behind, until his own time came to return the madman's blows and imprecations with confounding, and at the same time most successful interest; for,

while engaged keeping up the extension required to overcome, if possible, the muscular contraction in order to facilitate the reduction aimed at, Liston knowingly and cleverly seized his opportunity, the most precious opportunity in such cases, of staggering the muscles into comparatively flaccid abeyance. Liston, while keeping up the extension with one of his big and powerful fists, and fiercely eyeing his still cursing and kicking surgical victim, loudly exclaimed: 'You d——d scoundrel, what are you swearing at?' and with one momentarily released right mighty hand struck him a bang between the eyes, when immediately, through Liston's masterly manœuvering, in popped the stubborn joint of the now bunged-up-eyed carter, who obviously failed to appreciate either the laughter or the applause of the audience."

Etherization by the Rectum by Yversen's Method.

Dr. J. S. MILLER reports four cases in *Med. Times* in which he has used this method of giving ether and arrives at the following conclusions:

In this method of etherization the most obvious advantages are as follows:

1. Dyspnoea is avoided and the patient is saved from the anxiety due to a sense of impending suffocation.

2. There is avoided the danger of simultaneous irritation of the superior laryngeal and pneumogastric nerves at the periphery—these irritations neutralizing each other in the respiratory centre, and suspending respiration entirely.

3. The danger of asphyxia is lessened—the patient not being drownded in his own mucous—and the integrity of the pulmonary mucous membrane as an organ of gas-exchange is preserved. Of course some vapor finds itself in the

lungs, and acts there as a local irritant elimination being by that channel. But the quantity is not great and does not constitute a source of danger. In the case reported the increase in secretion was too trifling for discovery.

4. The stage of excitation is therefore not prolonged by the struggles for breath. In general it may be said that the delirium of any alcoholic intoxication is a pleasant and good natured one unless the patient is crossed—as he certainly feels himself to be when a wet towel is pressed over his face.

5. Nourishment may be taken before operation to sustain the powers of life and lessen the dangers from shock.

6. Return to consciousness is prompt—this stage not being prolonged by carbonic-acid poisoning.

7. The anæsthetic seems as readily suspended as by the ordinary method—the bowel being promptly emptied by gentle massage.

8. Economy in ether is an advantage hardly to be mentioned with more important considerations.

The more obvious disadvantages are:

1. The exposure of person required—the abdomen being necessarily under observation, even if the catheter be inserted under cover.

2. More judgment and experience is required in the administration than by the ordinary method—over-boiling in the apparatus and too much distension being both painful and highly dangerous. The warning to cease is sudden, and must be immediately obeyed.

3. Just as the other mode is inconvenient in oral surgery, so in perineal operations is the apparatus needed for this method in the way.

In abdominal surgery, or if there be marked intestinal lesion, this mode is contra-indicated.

5. The inapplicability in cases of ac-

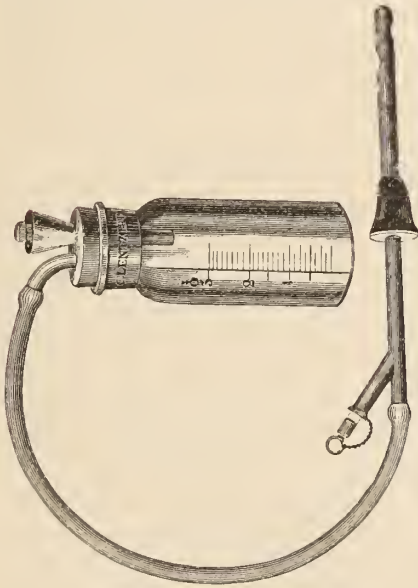
cident and emergency, when time cannot be allowed to prepare the bowel, has already been mentioned.

6. Diarrhœa has been noted in seven out of the thirty-seven cases on record, though in none of mine.

I believe this sequel is due to pre-existing intestinal lesion, to the lack of preparation, to a too great distension of the bowel, or to the accidental introduction of ether in liquid form. Furthermore, my method has differed from that of other experimenters in this respect, that, instead of allowing the va-

must pass through the stages of bungling use, condemnation and revival.

[Dr. Miller then exhibited a form of apparatus which he had had made for this purpose. It consists simply of a water bath, a graduated bottle provided with a funnel and valve for pouring in the ether, and a supply-pipe for conducting the vapor to the rectum. This tube terminates in a straight recurrent catheter, the exhaust-channel of which is controlled by a valve. The catheter is furthermore provided with a movable collar for pressure against the anus—it having been found that the vapor tends to escape by the side of the tube.]



DR. MILLER'S APPARATUS.

por to remain indefinitely, I secured a constant change by using a recurrent catheter, and introducing a certain quantity, or permitting it to escape, as indicated.

Other points of advantage and disadvantage may occur in later experience and to other observers, and new dangers may be discovered. But I am convinced that this method is worthy of further trial, and will find its place in surgery, fulfilling its own, though not *all*, indications. Like all else in therapeutics, it

Radical Cure of Hernia.

The following is an extract of an article published in *St. L. Med. & Sur. Jour.*, by H. S. GREENO, M. D.

Cures are more easily effected in oblique inguinal hernia of recent origin. Femoral hernia is, as a rule, quite readily cured although the operation is attended with more risk to the patient, requiring more care in operating upon young subjects, and old people are more readily cured than the middle aged. This I have demonstrated by extensive clinical experience.

In my first operations I used the instrument devised by Dr. Warren, and also used his fluid, subsequently I used the hernial syringe invented by Dr. W. B. De Garmo, which I think the safest for beginners in the operation. The needle of this syringe is so protected that no injury can be done to the canal or vessels. I have used the fluid as prepared by Dr. Heaton, and find it quite as effectual as that recommended by Dr. Warren. During the last two years I have used an instrument devised by myself which answers my purpose perfectly. It is simply a large sized hypodermic syringe, and a strong stout

needle, spear pointed, with holes on each side for the exit of the fluid. The irritant used by Dr. Heaton is composed of: \mathcal{R} . Ext. quercus alba, gr. xxviii.; ext. quercus alba fl. \mathfrak{z} j. ; morphia sulphas, gr. j. M. From fifteen to twenty-five drops are distributed over the interior of the canal by injecting the fluid drop by drop

The fluid I have used during the past year in nearly all of my operations, and which answers the purpose admirably, I prepare in the following manner: \mathcal{R} . Fluid ext. quercus alba, f \mathfrak{z} xij. ; evaporate by water bath to f. \mathfrak{z} iij. Then add alcohol, f. \mathfrak{z} jss. ; eth. sul. fl. \mathfrak{z} iv. ; morphia sul., gr. v. ; carbolic acid, gtt, xv. M. Sig. Inject twenty to fifty drops, depending upon the size of the opening.

The operation should be performed in the following manner. After the patient has been prepared for the operation, by previously moving the bowels by means of some mild cathartic, he is placed in bed. The head and shoulders low, hips slightly elevated, the inguinal ring and canal are thoroughly explored and the rupture accurately diagnosed. I introduce the beak of the instrument into the canal in the following manner. Invaginate the left fore finger into the scrotum and after locating the external ring, the thumb of the left hand is pressed from above downward on the integument directly over the external ring. The integument and tissues are held between the fore finger and thumb. The needle is then passed perpendicularly down by the side of the thumb until the point reaches just below and under the arch of the external ring. The instrument is then lowered, the point of the needle slipped under the arch of the ring, and quickly passed into the canal and passed up so that the beak reaches to or a little above the internal ring. The fluid is then freely

distributed over the interior of the canal, and also around the margins of both the internal and external ring. A compress is now placed over the inguinal canal and the parts tightly bandaged. In some of the bandages I use an electric truss with a broad front piece from which I remove the wood pad. A towel or napkin folded up to the suitable size, answers for the compress, the elastic truss is provided with perineal straps which hold the pad from slipping up or getting misplaced. This dressing I find far superior to a bandage, for the reason it can be more accurately adjusted, does not slip or get out of place, as is often the case with a bandage. Great care should be taken in introducing the beak of the instrument into the external ring. If, as has been done by some, the needle is passed through any portion of the invaginated scrotum, it pierces a fold of the tunica vaginalis, the prick of the needle or a drop of fluid coming in contact with this very delicate membrane an inflammation may be set up which will prove very annoying, and may defeat the purpose of the operation. Or if the cord or its sheath is injured the irritation will extend to the epididymus or testicle, producing a very troublesome epididymitis or perhaps orchitis. In such cases the operation generally proves a failure. I keep my patient in bed eight days. After the operation I generally administer a small morphia powder to lock up the bowels. I do not allow the bowels to move if I can prevent it, under four or five days. When my patient is allowed to get up, I fit him with a light truss, or allow him to continue to wear the elastic truss with slight compress, one month, night and day. I then require him to return to me for examination. If I find any degree of slipping of the bowel or that the rings are not sufficiently closed, I

repeat the operation, using about one-half as much of the fluid as in the first treatment, only keeping my patient four days in bed. It is very seldom that it becomes necessary to repeat the operation more than twice, but if I find after three or four months or longer, any disposition to a return of the hernia, I again repeat the operation. After a sufficient amount of irritation has been established along the canal and around the rings, if the proper support is maintained the rings continue to contract and the parts to strengthen for one or two years, and finally a perfect cure will result in nearly every case, so that the truss can be thrown aside.

To Prevent Bed-sores.

Paint the parts once or twice a day with collodion and castor-oil, with equal parts of alcohol and white of egg beaten together, or with "traumaticine" (a solution of gutta-percha in chloroform—4 parts to 30). If an excoriation forms, the following ointment is applied: Cerate or cold cream, 30 grammes; extract of cinchona, 1 to 3 grammes; precipitated oxide of zinc, 1 gramme; watery extract of opium, 15 centigrammes. For *phlebitis*, the following application is made along the course of the affected vein: Purified lard, 30 grammes; watery extract of opium, extract of belladonna, extract of hyoscyamus, extract of conium seeds, $\bar{a}\bar{a}$, 3 grammes. In addition, poultices are used.—*N. Y. Med. Jour.*

Operative Delay in Strangulated Hernia.

A similar delusion of fatal issue is that leading to postponement of operative interference in strangulated hernia. Repeated attempts at forcible taxis and medical pow-wow-ing with temporizing measures, have ended more lives than the use of the knife. Herniotomy, done

within twelve hours is almost always followed by recovery. Death is to be expected, however, if strangulation has existed for two or three days; and the gut has been bruised by violent manipulation in the endeavor to relieve the constriction by taxis. Moderate taxis under ether, a half-day's treatment with cold applications and the internal use of morphia, and a second moderate attempt at taxis, followed, if unsuccessful, by immediate operation, is the sequence to be followed in strangulated hernia. When symptoms of strangulated hernia exist, the slightest fullness and tenderness in one groin over either of the rings, is a sufficient localizing indication to warrant operation.—*South. Med. Record.*

Chloral Hydrate as a Vesicant.

Powdered chloral sprinkled on adhesive plaster and melted by a gentle heat (not more than enough to cause the plaster to adhere to the flesh) is applied while warm to the part where the blister is wanted; within a few minutes a gentle heat is felt, increasing in intensity for a short time, then gradually easing off, and at the end of about ten minutes the part is free from pain. At the expiration of this time, or as soon as the pain has subsided, the plaster, if removed, will disclose a surface as effectually blistered as by a cantharidal plaster after six hours. Thus within about ten minutes the work of an old-fashioned blister is accomplished with many advantages over the latter, (1) rapidity of action, (2) the ease of application, (3) the non-occurrence of strangury, and (4) farther, it may never be taken off to have the blister dressed, but may be allowed to remain until the plaster loosens and comes off itself. The blistered surface in the meanwhile healing kindly.—*Southern Clinic.*

A Good Remedy for Burns.

Dr. FINFROCK, writing in the *N. Y. Med. Record*, states that, having had during the last twenty years to treat an unusual number of cases of burns, he has found the following remedy by far the best. He first applies powdered bicarbonate of soda, in order to relieve the pain, and then dresses the parts with the following ointment, changing the dressings only when the discharge renders it absolutely necessary. \mathcal{R} . Ceræ flavæ, \mathfrak{z} j.; ol. lini. rectif., \mathfrak{z} iii; acid tannic, \mathfrak{z} j.; bismuth, gr. xx. Melt the wax in a clean tin and porcelain vessel, add the oil, and heat to nearly boiling. Remove from the fire and add first the tannic acid finely powdered and then the bismuth. To be thoroughly incorporated by stirring until cold.—*Med. Jour.*

A New Sponge.

In the *Lancet* Dr. SAMPSON GAMAGEE says: To Sir Spencer Wells I am indebted for the suggestion which led me to experiment with a variety of materials with a view to preparing a sponge combining absorbing power and elasticity, and cheap enough to be burnt after use, so as to render sponge infection impossible.

My first idea was to make a combination of pitch-pine shavings and absorbent cotton within absorbent gauze. The resulting ball answered the purpose fairly well, but it was not soft enough. It would be tedious and profitless to recount the experiments made with almost every variety of vegetable and animal fibre, in combination with absorbent gauze and cotton. Willow shavings and Manilla fibre had brought us to what appeared very near perfection, when I accidentally found that a ball of curled cocoanut fibre, enclosed in absorbent gauze sinks in water. That es-

tablished, we made other balls with absorbent cotton in the centre of the cocoanut, absorbent cotton round it, and then the gauze envelope; the idea being to take up the fluid rapidly and transmit it, through the springy cocoanut fibre, to the absorbent cotton centre. By experiment, I found that a ball so made takes up most readily from sixteen to eighteen times its own weight of blood or water, which, when squeezed out, still leaves the ball elastic and absorbent, readily filling and swelling out again when dipped in liquid and squeezed a number of times in succession.

Once I had secured a good combination of fibres, it became a question how to render them perfectly and *permanently* antiseptic. This fresh start led on to another series of trials of which it is only useful for present purposes to recount the end. Every endeavor having failed, it suddenly struck me that within the absorbent cotton nucleus of the sponge might be enclosed a very thin ball or capsule, containing the antiseptic of any kind, and, within certain limits, in any quantity desired; the antiseptic to be set free by cracking the capsule with a squeeze, just before using the sponge. The idea proves perfectly practicable, and Messrs. Burroughs, Wellcome & Co., the manufacturing chemists, have undertaken to carry it out. Some little time must elapse before all the details can be effected; but sufficient evidence has so far been obtained to warrant the belief that the principle of my sponge may be adapted to the fulfilment of many requirements, as an absorbent and antiseptic sponge, pad, or dressing, in civil or military surgery, in medical and in obstetric practice.—*Med. & Surg. Reporter.*

Bog-Moss an Improvement on Cotton-Wool.

It may be remembered that some time ago the virtues of dried black peat as an antiseptic application to wounds were highly extolled by Dr. NEUBER, of Kiel. Various theories were started to account for this antiseptic action. From recent observations it would seem that it is due, at least in part, to the extraordinary power of absorption possessed by the bog-moss, of which, as is well known, peat is almost entirely composed. Bog-moss (*sphagnum*) has a peculiar structure, the leaves consisting in a considerable part of large colorless cells, from which the contents have disappeared; these empty cells communicate with a series of similar cells arranged in layers on the stem. It is owing to this capillary net-work that the bog-moss is able to raise the water of the bogs in which it grows in large quantities to the topmost leaves through a height, sometimes, of several feet. There are several species of *sphagnum*, but all are closely allied in structure and function. Carefully gathered and thoroughly dried, bog-moss forms a soft, highly absorbent material, very suitable it is said when made into pads, for use in cases where copious discharge would otherwise necessitate frequent change of dressing, since it can absorb eight times its original weight of fluid without becoming too moist. Though not an antiseptic dressing, it might conceivably be of great use when antiseptics can not be obtained. In war, for instance, a large pad of this soft absorbent material might furnish an excellent first dressing. The only point to be attended to in its preparation seems to be that it must be dried at a low temperature, so as not to destroy the peculiar structure upon which its absorbent power depends.—*British Med. Jour.*

Collodion for Wens.

Dr. WILLIAM B. LAMM (*Medical Age*) calls attention to the use of collodion as an application to wens, especially of the eyelids. He has succeeded in removing these troublesome little tumors in this way by keeping the part well covered in a short time, comparatively, without the least pain or inconvenience to the patient. The effect of this agent is, no doubt, by its equitable compression upon the tumor, producing absorption.

Ingrowing Nails.

The following practical hints on the management of ingrowing nails are from the *Journal of Cutaneous Diseases*:

When the nail threatens to grow into the skin, or has already injured it, the first indication is to put on a sock of moderate size and to remain quiet. Afterward the nail is to be scraped on the affected side till it is sufficiently thin; then it is to be seized with a delicate forceps, raising it in a sense inversely to its natural curvature. This having been done, a small lamina of lead of a few millimeters' thickness is to be inserted beneath the nail, and, after folding it over the toe, it is to be fastened there with a slip of plaster. In this manner, the granulations being no longer in contact with the margin of the nail, the pain ceases, and the sore heals more or less rapidly, during the whole of which time the apparatus should be frequently inspected, so that the lamina of lead may not become displaced. Besides this, it is necessary to scrape the nail every two or three days, so as to keep it thin and flexible, until the skin returns to its natural state, and can resist the pressure of the nail, and then the lead is removed. Hebra treats ingrowing nail in the following manner: Cut some flakes of lint of the length of

the lateral groove of the nail or a little longer. The lint is to be placed on the nail parallel to its groove; then with a flat probe introduce the lint thread by thread between the flesh and nail. Thus the parts are separated, with the little cushion of lint lying between. The sulcus is then to be filled with pledgets of lint, and finally long narrow strips of adhesive plaster are to be applied, always from above the inflamed sulcus downward, in such a manner that the latter is still farther removed from the margin of the nail. With such a dressing applied with sufficient care, there is no pain whatever; and the patient can in a short time put on his ordinary stocking and walk without trouble. After twenty-four hours the strips of adhesive plaster are to be removed, being previously softened in a bath of tepid water. This dressing is to be repeated daily, and in from two to four weeks it will be found that the toe is entirely well.

VENEREAL DISEASES.

The Treatment of Gonorrhœa by Open Wire Bougies.

Gonorrhœa is a specific catarrh of the mucous lining of the urethra—a condition in which there is rapid inflammatory cell-proliferation and exudation of fluid from the mucous surface. These catarrhal changes necessarily begin at the anterior extremity of the urethra, and travel backwards. The fossa malleolaris suffers early and severely; and backwards along the course of the passage; another part that is severely affected is the sinus of the bulb. These two parts are wider than the parts of the canal immediately behind each, and so small portions of fluid are apt to lodge more persistently there than in other parts of the canal.

In the local treatment of this affection it is obviously very desirable to keep separate the inflamed mucous surfaces. The condition is in many respects analogous to a moist eczma intertrigo, where cure is indefinitely postponed unless the surfaces are by suitable dressing maintained apart. The injections in gonorrhœa that have been most successful are those that have best fulfilled this indication of treatment, and lately Mr. Cheyne's medicated bougies of cacao-butter have given further aid in this direction. To carry out more effectually the keeping separate the secreting surfaces, I have had made open wire bougies. These are of two forms.

The first form is for the effective administration of injections. The part *a* is a short length of catheter-tube, to which are soldered the wires of the open bougie, and to the part is also attached a short piece of India-rubber tube. This instrument being introduced until the part is well within the meatus of the urethra, the solution to be injected is introduced by a syringe, and, when quite full, the india-rubber tube is compressed by a spring clip, to prevent the escape of the fluid. Within from twenty to thirty minutes the injection will be almost wholly absorbed by the urethral walls, and then the instrument may be withdrawn. By this means, the injection is applied to, and kept applied to, any part of the urethra that may require it until entirely absorbed. By the ordinary method at present in use, the contact is at best but very brief; and, as the part of the passage that is most in need of treatment is usually the most irritable, the injection is, by the instantaneous reflex contraction of that part, at once driven from it into other portions of the canal.

The second form is an open wire arrangement throughout, and is constantly worn by the patient, so that the discharge may drain freely away, and not lie in the passage and give rise to renewed secretion, as constantly goes on in the ordinary treatment at present. These instruments are well borne in the urethra, and the patient pursues his ordinary avocations while wearing the second form.

The length of the wire bougies is of course, in proportion to the distance up the canal to which the catarrhal affection has traveled; in recent cases an inch and one-half may suffice; in older cases, it may be necessary to have it greatly longer.

Mr. Hilliard, of Renfield street, Glasgow, can supply them to any member of the profession who may be inclined to put this method of treatment to the test.—D. C. M'VAIL, *Brit. Med. Jour.*

Hot Urethral Injections in Gonorrhœa.

Dr. E. L. KEYES, in the March number of the *Journal of Cutaneous and Venereal Diseases*, records some experiments with recently recommended remedies in gonorrhœa, among which he mentions hot water urethral injections, giving a few cases in illustration. He says, my impression of hot water treatment based upon these few cases is that they are not only useless but dangerous in many instances, especially in fresh gonorrhœa in a virgin subject. In the case of old sinners, whose urethral canal has been toughened by several previous inflammatory attacks, they appear to be harmless, sometimes even efficient. He finally concludes that the hot-water treatment of gonorrhœa is unreliable.

If properly used the hot water treatment is of great service. It should be used by injection into the urethra, and

by immersion of the genitals in hot water (100° F). In the early inflammatory stage of the most inflammatory cases this treatment reduces the frequent desires to micturate, but cannot be relied on to check the discharge. So far from lighting up cystitis, in our hands it has had the opposite effect. This treatment seems to be an old one, as Dr. Keyes says he saw Maisonneuve use it in the Hotel Dieu, in Paris, in 1865. It deserves extended employment, before it is condemned.—*N. C. Med. Jour.*

The Specificity of Gonorrhœa.

In the course of his remarks on gonorrhœa, before the Philadelphia County Medical Society, which we have noticed elsewhere, Dr. WHITE related the following: A patient of his had a mistress, with whom he had lived many years—in fact, they were practically man and wife. Dr. W. was sure that the woman was true to the man. The man contracted a urethritis, as Dr. White believes, from some innocent muco-purulent discharge from his mistress. He went to his family physician, who told him that he had gonorrhœa; but not believing in its non-specificity or through negligence, failed to impress upon him the fact, which Dr. White seems firmly to believe, that urethritis or gonorrhœa is not necessarily derived from a pre-existing specific disease. The man, therefore, suspecting his mistress, abandoned her with harsh words. She, deprived, unjustly as she believed, of the support and love to which she had been accustomed for so many years, became despondent, and within ten days committed suicide.—*Med. & Surg. Reporter.*

DISEASES OF THE SKIN.

Micrococci Causing Loss of Hair.

Without any detectable cause, and without the accompaniment of any other symptom, a male individual was attacked by alopecia, which the patient himself attributed to infection contracted in a hair-dressing saloon. In the region of the right temporal bone was observed a circular place 5 to 6 cm. in diameter, perfectly bald. In its centre were noticed a few white hairs on the shiny skin, while the margin contained a zone covered by epidermis scales. In this zone the hairs appeared broken and stunted in their growth. The least pull on a hair at once caused its falling out, the bulb always coming with it. By coloring, Dr. SEHLEN, who reports this case in the *Centrbl. f. d. Medi. Wissen-sch.*, was enabled to prove the presence of small, round cocci, which were less than a millimetre in size, and found in large quantities surrounding the hair in the cells of the epidermis, and sprinkled between the sheaths of the roots of the hair. The author has instituted a series of cultures not yet concluded. A mild solution of corrosive sublimate ($\frac{1}{30000}$) destroyed the cocci and established the re-growth of the hair.—*Therap. Gazette.*

Epilation as Practised in the Treatment of Parasitic Diseases,

Although it has the sanction of age and custom, bids fair to disappear as a mode of treatment. Dr. SHOEMAKER, of Philadelphia, in an article which appeared in the July number of the *Journal of Cutaneous and Venereal Diseases*, gives his opinion of this method, and his reasons for discarding it bear the impress of logic and common sense. In the first place, as he states, the parasite is

not eliminated by epilation, whereas thorough treatment will completely eradicate it, and when it has disappeared the hairs and their follicles will again assume a healthy and normal state. In the next place he very justly claims that it is well nigh impossible to epilate diseased hairs, from the fact that they are brittle, break off easily, and even if successfully taken out, only aggravate the diseased condition of the follicles. Cutting off the hair or shaving it is also a very poor method, for when the applications are rubbed in the scalp the stubby hairs are disturbed to such an extent as to increase the irritation about the follicles. The proper method of treatment is to use parasitocides and avoid all conditions which tend to nourish the parasite. One of the best methods of avoiding the latter is to discard water altogether. Applying water to the skin only renders it in a better condition for the nourishment of a parasite which has lodged there:

The Treatment of Seborrhoea.

Dr. GEORGE H. FOX thus writes in the *Nashville Med. & Surg. Jour.*

If the systemic conditions which predispose to seborrhœa were better understood, much might be accomplished by attention to diet and internal medication. In the present state of our knowledge we are forced to rely mainly upon external treatment. There are two objects to be kept in mind in the treatment of every case, viz., to soften, if necessary, and to remove the sebaceous secretion, and to stimulate the glands to healthy action. The first aim can be readily accomplished; the second sometimes proves to be a difficult task. In seborrhœa oleosa the frequent use of soap tends to keep the skin dry, but rarely effects a permanent change in its condition. After bathing the skin with

soap and hot water, and carefully drying it, the application of precipitated sulphur, tannic acid, or some other astringent powder, is usually beneficial. If there be a tendency for thin crusts to form over the affected surface, the following ointment, lightly applied by means of the finger, is preferable: *R.* Washed sulphur, 8 parts; balsam of Peru, 2 parts; petrolatum, 40 parts. *M.* In obstinate cases of seborrhœa of the nose, and these cases are generally obstinate, I have obtained the best results by having the patient rub the nose vigorously before going to bed with a soft linen rag wet with ether, and then apply the following lotion: *R.* Sulphate of zinc, 3 parts; sulphate of potassium, 3 parts; alcohol, 10 parts; rose water, 100 parts. *M.* In dry seborrhœa of the scalp the crust may be readily removed by soaking it thoroughly at night with olive or almond oil, and shampooing the head in the morning with the official tincture of green soap. This will leave the scalp clean and natural in appearance, but a cessation of the treatment at this point will be speedily followed by a return of the crust. The patient must therefore be directed to shampoo the head twice every week, or oftener if it seems necessary, and to apply meanwhile some slightly stimulating ointment every night. Hyde recommends the following: *R.* Oil of sweet almonds, 10 parts; carbolic acid, 1 part; alcohol to 100 parts; oil of bergamot, q. s. *M.* If this plan of treatment is carried out for a few weeks, the tendency to the return of the crust will usually cease. In the many cases where seborrhœa does not form a thick crust upon the scalp, but occurs in the form of dandruff with the falling of the hair, it is often necessary to prolong the treatment for several months.

DISEASES OF THE EYE AND EAR.

Cold, Hot and Warm Applications in Diseases of the Eye.

Dr. J. MORRISON RAY. In the first stage of granular conjunctivitis, where there is much inflammation, iced cloths are useful, checking inflammation to some extent and allaying irritation. Later on, when this condition becomes chronic with its characteristic hard trachoma granule, there being very little inflammatory action present, hot water is often beneficial, and may even be curative. By frequent applications a certain amount of irritation is aroused, accompanied by a swelling of the conjunctiva and a softening of the trachomatous masses, which tend to hasten their absorption. This can be so regulated as to keep up a continuous slight irritation, and thus often a rapid disappearance of the granulations, without even the use of caustics, which have a tendency to cause cicatricial contraction of the conjunctiva, followed by all the bad symptoms incident to this condition, trichiasis, eutropion, etc.

In acute inflammations of the cornea, especially when due to traumatism, iced cloths often give great relief by allaying the pain and limiting the inflammation. In phlyctenular keratitis accompanied by photophobia, which is often seen in badly nourished children, the dropping of iced water on the exposed cornea has been recommended. I have recently seen a case which demonstrates the efficacy of this treatment to a marked degree. The child has been treated by other methods for some time without any apparent benefit. Under the use of iced water, dropped on the forcibly exposed cornea, the improvement was remarkable.

In necrosis of the cornea, occurring in strumous children, non-inflammatory

in origin, and without any conjunctival irritation, our chief reliance is in the persistent use of fomentations made of chamomile flowers or poppy-heads.

In abscess of the cornea, accompanied by hypopyon, or the formation and deposit of pus in the anterior chamber, fomentations allay the pain and promote the absorption of the pus. In that form of ulcer of the cornea called *serpiginous*, occurring at its margin as an ulcerated band with irregular edges with a tendency to spread circumferentially (a condition often seen in old, feeble, and debilitated subjects), and accompanied by considerable conjunctival irritation and a decapillary injection, with often excessive degree of photophobia, rapid improvement sometimes follows the application of heat, moist or dry. The latter is to be preferred as the former produces much swelling of the lids or edema of conjunctiva. The hot applications may be supplemented by a sol. of sulph. eserine (gr. $\frac{1}{4}$ -gr. $j-\frac{5}{8}$ j) dropped in eye several times a day. This is often used with marked benefit. Careful attention must be given to hygienic surroundings. Exercise in open air several times a day should be enjoined, during which the eyes must be protected from bright light by means of colored glasses.

The above treatment, if carried out properly, has often succeeded in cases where incision of the base of the ulcer (Soemisch's incision) has failed. In interstitial keratitis hot fomentations assiduously applied, their effect being carefully watched, together with frequent instillations of atropine, are sufficient to allay the pain and ciliary irritation. In suppuration of the cornea after cataract, extraction, especially if it be in a weak and debilitated subject, heat in some form is always serviceable. There is generally considerable chemo-

sis of the conjunctiva and swelling of lids, and in this condition dry heat would seem to be indicated. These eyes are, however, usually doomed, and iced cloths often tend to limit the inflammatory condition; but if this be once fully established, the hot water will promote the suppurative process which ultimately terminates in phthisis bulbi.

In iritis, atropine to dilate the pupil preventing adhesions and putting the eye at rest, and the frequent application of hot water to allay the pain and ciliary neuralgia make an excellent treatment.

Frequently a Turkish bath has a marked effect on these cases. I have often seen a pupil dilate under atropine just after a Turkish bath, which before would give no response to the drug, no matter how persistently applied. Traumatic iritis is the only form which will bear the application of cold, and in this the patients often prefer heat, especially if there is a suppurative process going on in the part.

In inflammation of the deeper tunics of the eye, if accompanied by much ciliary irritation or neuralgia, hot water will be agreeable and often beneficial. In sympathetic inflammations hot poultices of flaxseed or bread and milk continuously applied for some time has been said to be followed by good effects. Ayers reports a case in which poultices were used almost continuously for four months and with marked improvement in the condition of the eye. In inflammation of the circumocular fibrous and cellular tissue, cold continuously applied for hours at a time will tend to diminish the heat and swelling of the part and relieve the pain. If it be desired to expedite the suppurative process, which often can not be prevented, hot water would be in order. It can be seen from what

has been said that no strict rules or rigid laws can be laid down as to the use of these agents. Potent for good in one case, they may produce the opposite effect in another suffering from a similar condition. It would seem that the following would be indications for their use in general : In acute inflammations, followed by much elevation of temperature or swelling of the part, or in any condition where a lessening of the vascular action is required, cold in some form, dry or moist, intermittent or continuous, is indicated, and generally gives the required relief. Where an increase in the blood-supply of a part is desired, or when the vitality is threatened by a slow necrotic rather than an inflammatory process, heat in some one of its modes of application is clearly indicated. New York.—*Louisville Med. Times.*

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The Ointment of Boroglyceride (Unguentum Boroglyceridi).

Dr. L. WEBSTER FOX (*Med News*): The following remarks, relative to the use of unguentum boroglyceridi in certain ocular diseases, are based on an extended experience of over one year, during which time many cases have been treated. The following is the formula for making the ointment : \mathcal{R} . Boroglyceride, 50 per cent. solution in glycerine \mathfrak{z} ij.; vaseline, \mathfrak{z} vj.; ol. rosæ, q. s. M.

Heat the boroglyceride, and, while hot, add it slowly to the vaseline, stirring constantly until thoroughly mixed.

To this formula may be added mydriatics, myotics, and the stronger astringents. I have in my possession samples of the ointment containing atropiæ sulph., gr. iv. to \mathfrak{z} j., hyoscyamiæ sulph., gr. ij. to \mathfrak{z} j., homatropiæ hydrobrom., grs. ij. to \mathfrak{z} j., eserine sulph., gr. ij. to \mathfrak{z} j., to cupri sulph., gr. ij. to \mathfrak{z} j., aluminis

pulv., gr. vj. to \mathfrak{z} j., and zinci chlor. gr. ij. to \mathfrak{z} j. These samples were prepared by Evans, druggist, 1104 Chestnut street, and have remained pure and sweet, preserving their consistency and the power of the suspended drugs unaltered.

The advantage claimed for the ointment over the boroglyceride in solution, in ocular therapeutics, is, that it can be more easily applied to the eyes of children by the untrained hand ; also, that we have a vehicle in which we can combine two drugs, one having a mydriatic (atropiæ sulph.) as well as an irritating effect on the conjunctiva, the other (boric oxide) astringent qualities. It is the experience of every ophthalmic surgeon that an aqueous solution containing a suspended drug, standing in a warm temperature for several days, soon becomes filled with a fungus. A careful ophthalmic surgeon would hesitate to apply such liquids to an ulcerated cornea, or even where there is conjunctivitis. The continued use of a solution of atropia will often excite an acute conjunctivitis and excessive dryness of the throat or erythema of the face, and in a very few cases marked atropia poisoning. By using the atropia suspended in the boroglyceride ointment, we escape these troubles. The boric oxide, being an astringent, counteracts the irritating properties of the atropia, the vaseline closing the mouths of the canaliculi, thereby preventing the atropia being carried through the lachrymal canal to the throat. The atropia is also, on account of the closure of the mouths of the canals, retained longer in the palpebral sacs, hence a more thorough dilatation of the pupil and paralysis of the ciliary muscle are obtained with a lesser quantity of the drug.

In certain purulent diseases of the eye I prefer the boroglyceride in glyce-

rine.* The following ocular troubles respond favorably to the action of the ointment when applied in a quantity about the size of a split-pea every three hours :

1. Ulcers of the cornea, when arising from anæmia.

2. Phlyctenular ulcers, both of cornea and conjunctiva.

3. Ulcer rodens, due to infection, and ramollissement of the cornea, due to pressure or exposure.

4. Marginal ulcers of the cornea, found in strumous children ; here the addition of eserine sulph. (gr. ij. to $\frac{3}{4}$ j.) hastens the reparative process.

5. Trephined ulcers (central) in children, and ulcers of the cornea in old individuals, and corneal infiltration with pus.

6. *Not* in abrasions of the cornea after removal of foreign bodies, nor in recent wounds of the cornea or sclerotic, either with or without prolapse of the iris.

7. In astigmatic keratitis ; accompanying this affection we have supra and infra-orbital pain, and at times temporal reflex, either of which is a diagnostic symptom. The addition of atropine sulph. (gr. iv. to $\frac{3}{4}$ j.) renders the action of the ciliary muscle passive, which being the exciting factor, relief is at once experienced. The ametropia must be corrected or the patient will have recurrent attacks.

8. In granular lids of young persons, complicated with pannus, the addition of atropine sulph. (gr. iv. to $\frac{3}{4}$ j.), or of cupri sulph. (gr. ij. to $\frac{3}{4}$ j.) is of the greatest value when we have the condition known as keratitis trachomatosa present.

9. In blepharitis marginalis, eczema of lids, and conjunctivitis ; not, however, when there is excessive lachrymation present in the latter trouble. In

these cases, the boroglyceride solution in glycerine (fifty per cent.) is preferable. The glycerine being hygroscopic has an affinity for water, the boric oxide being precipitated at once stimulates the diseased condition to healthy action, and relief soon becomes manifest.

In ophthalmia neonatorum, a fifty per cent. solution of boroglyceride in glycerine is applied every two hours (*ad lib.*), and an ointment of boroglyceride applied to the margins or the eyelids at night.

When applying the boroglyceride in solution, care must be observed in separating the eyelids ; this can be done with lid-retractors. In elevating the lids with the retractors, a pouch is made which can be filled with the solution.

An excellent and cheap retractor may be made of a hair pin ; curve the looped end to a right angle with its tines. This instrument is safer than the lid-retractors usually found in the ophthalmic instrument case, and is always at hand. When the corneæ become hazy or opaline, in ophthalmia neonatorum, use the ointment containing eserine sulph. (gr. ij. to $\frac{3}{4}$ j.) every two hours : a piece the size of a split-pea is to be applied, in addition to the solution of boroglyceride. By following this mode of treatment, the most troublesome cases are cured in a very few days.—*Med. News*

Uva Ursi in the Treatment of Gonorrhœa.

H. PASCHKIS ("Wiener Med. Presse;" "*Centralbl. f. klin. Med.*"), having found arbutin to be of little if any service in the treatment of these affections, has had the opposite experience with a pulverulent extract of *Uva ursi*, which he gives in doses of fifteen grains several times a day, either alone or mixed with sugar or milk. It always acts promptly as a diuretic.—*N. Y. Med. Jour.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fracture of the Clavicle and its Rational Treatment.

Fracture of the clavicle and its rational treatment was the title of a paper by Dr. S. W. WETMORE, who demonstrated two methods by the application of bandages to a student of medicine. He remarked that, although literature was replete with appliances for restoring and maintaining the fragments in position, for the last half century surgeons had very closely followed many of the old masters; but the most simple, practicable, and satisfactory measures were to be credited to men of our own times. If the fracture was complete, the shoulder was depressed and drawn forward by the pectoral muscles, while the sternal fragment was salient and sometimes perforated the overlying tissues, so as to make the fracture compound, although this was rare. It was a peculiarity of the pectoralis major that its uppermost fibres were inserted lowest, and the clavicular fibres thus became the direct antagonists of the sterno-cleido-mastoid, so that the further the humerus was carried backward the greater was the tension of those fibers and the more perfect the restoration of the fragments. The elbow double figure-of-8 bandage met all the requirements in an ordinary case of fracture in the middle third (the one under consideration), and this method, introduced many years ago by Dr. E. M. Moore, of Rochester, N. Y., was first described.

The reader had treated a number of cases with it during the past ten years, and without any unsatisfactory results. He heartily commended it to the profession. Its advantages were: 1. The

apparatus was readily obtained. 2. It could be applied over the ordinary clothing. 3. It was adjusted easily when it became disarranged. 4. Any attendant could be instructed so as to keep it readily in place.

The next method described was that of Dr. Lewis A. Sayre, of New York. [As both this method and Dr. Moore's are well known to the profession, being described in the standard text books, we omit the detailed descriptions given by the writer.—EDITOR.] It would be obvious that the key to the successful management of this injury consisted in making the clavicular fibres of the great pectoral muscle tense and keeping them so during the period required for repair. No method could be successful if the humerus was allowed to maintain a vertical position. Sayre's method had some advantages: It was evidently the more secure, firm, and unyielding at *first* (very desirable qualities, particularly with children who could not be seen frequently), and the patient presented a more comely appearance when dressed. Its disadvantages were: The surgeon, and particularly the country practitioner, did not always have the plaster with him; in hot weather the plaster was apt to excoriate, and become irksome and unpleasant; and, if sufficient traction was made on the humerus to make it useful as a lever, it necessarily became tedious to bear, and the patient tired of the constant strain. However, he did not feel qualified to criticise the method very closely. Both methods had been before the profession for several years, but he had been assured by a number of his friends that they were comparatively unknown; it was on this account that he had brought them forward.

Dr. R. W. Bishop made brief mention of a case of double fracture of the

clavicle that he had recently had under treatment, in which a three-cornered piece of the bone had been broken off, was turned edgewise under the skin, and could not be kept in position.

Dr C. E. Webster had visited Bellevue Hospital last year, and had been informed by an interne that Sayre's method was employed in most instances at first, especially if the fracture was dressed in the lecture-room, but that the plaster soon became loose and gave rise to excoriation, so that other appliances, not unlike those commonly seen, were subsequently made use of.

Dr. L. H. Montgomery had treated a number of fractures of the clavicle, but none of them had been compound or comminuted. In all of them union had taken place, and the patients, so far as he knew, were as strong as before the accident, although in all but two of the cases a deformity was left. One was the case of a little boy with a so-called "green-stick" fracture, and no deformity resulted. The other was that of a young man who was willing to lie abed for three weeks if the speaker could promise him a perfect result. He lay on a hard mattress for nearly that length of time, with a dressing consisting of bandages and a bag of sand applied over the seat of fracture, and a perfect result followed. The speaker could commend this method, especially in the case of a lady. He asked Dr. Wetmore if the treatment by Moore's method would apply to oblique fractures as well as to those that had been referred to in the paper.

Dr. W. L. Axford thought deformity almost always resulted. To raise the outer and lower the inner fragment was the correct plan of treatment, and yet more or less deformity would result. He was skeptical in regard to methods which were said to give perfect results.

He asked the reader of the paper if any of the cases he had treated by Moore's method had resulted in deformity.

The President had seen the case of comminuted fracture referred to by Dr. Bishop. What the reader of the paper had called Moore's method was the same as was known here as Isham's. It gave as good results as any, unless it were a Plaster-of-Paris bandage. He had long since abandoned the adhesive-plaster method, and thought the let-alone plan was about as good as any. Nature would bring about a good result, although it would be well to try to maintain apposition by a tight-fitting knit shirt.

Dr. A. B. Strong thought the subclavius muscle had something to do with the deformity, for it was irritated and excited to a contraction. He had never seen any dressing prevent deformity, and he thought the best plan was simply to put the arm in a sling or have the patient lie on a hard mattress.

Dr. W. H. Curtis referred to the danger of producing constriction of the brachial artery if the plaster dressing was applied too tight or kept on too long.

Dr. Wetmore closed the discussion, and stated that he had treated a great many cases in children, in adult females, and in men during the past twenty-five years. In those cases treated by the method he had advocated most urgently there had been no deformity, although many of the patients had been strong, athletic men.

Questions Respecting Intra-Capsular Fracture of the Femur.

These are asked by Dr. E. M. MOORE, (*Medical News*):

1. Is not the cause of fracture of the neck of the femur, whether intra or ex-

tra capsular, almost uniformly that of a blow upon the trochanter?

The writer insists upon this statement in contradiction to the views of Sir Astley Cooper, and also that the cases of fracture, either by muscular exertion alone, or by falls upon the knee, or a misstep, with direct force transmitted through the bones of the limb, are too rare to be the grounds for any diagnosis.

2. Is not the preservation of the periosteum of the neck, called in connection with the reflected capsule the cervicle ligament, although only partial, the common rule and not the exception?

This statement was confirmed by the exhibition of three specimens of recent fractures—one of three days, one of five days, and one of eight days after the fracture. These were all the writer had ever seen and were all in the same condition.

3. Does not this condition, if preserved, supply nutrition to the upper fragment amply sufficient for entire repair?

This question is asked in reply to the opinion that the nutrition in intracapsular fracture must depend upon the small circulation of the ligamentous tissues. If the cervical ligament remains in even a small part, there cannot be any deficiency of nutriment.

4. Is not the outer layer of what is called the periosteum of the neck, a rudimentary organ?

This opinion is defended on account of the uniform rise of the capsule from the edge of the articulations. The general law is interfered with by the length of the neck of the bone. Nature has laid down firmly on the periosteum, but retains the primary thought.

5. In reputed cases of absorption of the neck after blows upon the trochanter, said to be without fracture, is it

reasonable, much less a perfect induction, to infer a similar result, when the changes of condition are similar only in one point and dissimilar in every other, from those cases of inflammation without a blow?

This was proved by the exhibition of cases of recent fracture.

6. Should not the induction read thus: The head of the femur and the acetabulum, not being altered, the shortening of the neck could not be from the inflammation resulting from the blow.

7. Finally, does not the practice of modern surgery produce a vastly improved result, in cases reported, as compared with the methods of the past generation.—*Det. Lancet.*

Complete Dislocation of the Scapula.

The *London Med. Record* tells us that Dr. BOING of Dinslaken, reports to the *Berlin Med. Wochensch.* a case of complete dislocation of the scapula which occurred in his practice. The patient had been caught by the projecting handle of a wheel, and pressed against the edge of an iron upright belonging to the machinery, which had inserted itself under the inferior angle of the scapula, and had pushed the bone forwards under the pectoralis major. When first seen, the patient had a decided hollow where the right scapula with its muscles ought to have been, and the bone was entirely covered by the pectoralis major, only the tip of the inferior angle being discovered on careful palpation. There was no cutaneous wound, only a red mark where the edge of the upright had pressed. The hand could be pushed under both the latissimus dorsi and the pectoralis major, but the only place where tenderness was complained of was the inferior angle in the before-mentioned position. Reduction was

easily effected by raising the arm, the trunk being firmly fixed, and using the acromion as a fulcrum, when the scapula slipped suddenly back to its normal position, with the same sound as when a joint is put into place. No muscular laceration could be made out. The first rib was then found to be fractured about the middle, evidently from muscular action, as the fragments projected outwards, and it could not have been the result of direct violence. The fracture caused a wound of the lung, which set up traumatic pneumonia; but in sixteen days the patient was able to go about again, and in a month he was back at work.—*Med. & Surg. Reporter.*

Iodoform in Wounds.

Prof. GROSS taught, never, under any circumstances, to use over forty grains of iodoform as an application to surgical wounds.—*Col. & Clin. Record.*

Compound Bismuth Mixture.

R̄ Bismuth subnit, 3 j.; zinci sulph; plumbi subacet., āā gr. xvijj.; tannin, 3 ss.; aqua rosæ, ʒ vss. Mix. For external use.—*Louisville Med. News.*

Spina Bifida Cured by Elastic Ligature.

The *Lancet* tells us that Dr. AUTONINO TURRETTA has republished from the *Giornale di Clinica e Terapia*, of Messina, a case of spina bifida successfully treated by the elastic ligature. His aid was requested for a female child two months old, apparently in good health. She had a tumor as large as a small apple in the middle line, opposite the two last cervical vertebræ. It existed at birth, and had since slowly increased. It was supported by a pedicle which measured an inch and a half in circumference. The covering

skin was very thin, and of bluish-red color. The tumor was soft, flaccid and fluctuating; under strong pressure it diminished somewhat in size; the child cried, and slight convulsive movements were excited in the limbs. No other deformity was present, neither was there paralysis of any organ. An exploratory puncture at the base of the tumor with a trocar gave exit to a thin transparent liquid of alkaline reaction. The tumor shrank, and the aperture was closed with iodoform collodion. Distention and fluctuation were again perceptible in twelve hours. The tumor having been half emptied by another puncture, its pedicle was constricted with a couple of turns of elastic ligature. At the moment of constriction the child cried, the face became livid, and some clonic movements were excited; but in a few hours the patient took the breast and rested. The next day vomiting was persistent, there was a tendency to coma, and twitching of the upper limbs. The condition on the third day was unchanged, and a small dose of calomel was given each day. All these symptoms had subsided on the sixth day, and the ligature with the tumor separated on the twelfth day, leaving a granulating surface, which gradually contracted. The cicatrix was complete and the child cured on the twenty-seventh day.—*Med. & Surg. Reporter.*

Laparotomy for Volvulus.

The *Gazetta degli Ospitali* reports that Dr. MEDINI performed laparotomy in the Ospitale Maggiore of Bologna on the 19th of April last, for twisting of the intestine. The operation was quite successful, and the patient (a male, aged sixty three), may be considered cured. Notwithstanding the manipulation required to disentangle the intestinal coils, and to separate the adhesions be-

tween them, the case progressed without serious symptoms.—*Ibid.*

For Burns.

For burns, Prof. BRINTON mentioned the following dressings : Equal parts of lime water and linseed oil ; white lead ; unsalted lard ; and a little oil of bitter almonds is elegant—"if you're burnt about the face yourself, use this."—*Med. Med. Journal.*

Orthoxysulphite of Phenyl,

Also called sulpho-carbol, has lately been proposed by M. Laborde (*Progres medical*) as a substitute for carbolic acid. It is said not to be poisonous and to be much less odorous than carbolic-acid, while it is equal to the latter as a preventive of putrefaction and fermentation.—*N. Y. Med. Jour.*

Burns and Scalds.

Dr. J. H. WOODWARD (*Med. & Surg. Reporter*): The constitutional symptoms present in any case will depend upon the power of endurance of the patient and, speaking generally, upon the extent of surface burned. Pain is a constant symptom, and seems to be most intense in cases of the second degree. There is generally some shock at the outset, and it seems to be prolonged by the pain. As a rule, the quantity of urine excreted is diminished from the outset. In many cases during the first week or two, that may become a very serious symptom. In a considerable number of cases, albumen may be found in the urine after the first twenty-four hours, and, in some cases, blood may also be found there. During the first week the temperature may be elevated to 100° – 101° . In more serious cases,

the temperature will range from 100° to 103° for five or six days. The heart generally requires stimulation. The patient will emaciate very rapidly, even when the burn appears to be of moderate severity only.

When the burn affects a large area of skin, whether it be of the first, second, or of any degree, the prognosis must be very guarded. The presence of albumen or blood, or both, in the urine should be regarded as a grave symptom. Of all the cases of death from burns that have come under my observation, a certain number have died of shock within forty-eight hours. But a larger number have perished at a later period. Those cases have perished after presenting the following symptoms : The urine was diminished very much in quantity and generally contained albumen ; the skin was dry and the bowels constipated ; the patient became delirious, and after several days he became stupid. The pulse was rapid and feeble ; the temperature was above 100° for several days, and within twenty-four hours of the patient's death, began to rise until some of these cases died with a temperature of 108° ; there was failure of the peripheral circulation in the extremities a number of hours before death.

Only one case presented any symptoms of duodenal trouble. And but one instance of ulceration in the duodenum has been found in the autopsy room. That case was one of "frost-bite" of the fingers of both hands.

Having briefly referred to a number of the most important symptoms, we will consider the constitutional treatment. For the pain, morphine should be given hypodermically in sufficient amount to make the patient comfortable. And *tr. digitalis* or whisky may be given hypodermically for the feeble

heart-action during the period of shock. As soon as the patient has rallied and can take substances by the mouth, he is given *inf. digitalis*, $\frac{3}{4}$ j.; *potassii acetatis*, gr. xv., every three hours night and day. He is put upon a milk diet exclusively. Under that course of treatment, the patients do better than if they are not managed with the object of relieving the kidneys. As soon as the patient is strong enough, a cathartic is administered. And should any suspicion of uræmic poisoning become justifiable, diaphoretics are added to the list of drugs. In one such case I have administered nitrate of pilocarpine, hypodermically, in sufficient amount to excite the action of the skin. The patient improved very markedly after that drug had been administered. The temperature seldom requires treatment. Although the fever will continue for a number of days, and, although the patient is in poor condition to endure a high temperature, the experience of this hospital seems to be in favor of permitting the fever to run its own course. Antipyretic doses of quinine and cold baths injure a certain number of these patients much more than the febrile movements. Should the temperature begin to rise after remaining pretty steadily about 102 for a number of days, in many cases it would be better to attempt to establish the peripheral circulation in the extremities, than to give quinine or a bath. In such cases, the temperature may rise because the circulation is poor in the skin. If such be the case, it is ruinous to give large doses of quinine.

Turpentine stupes or flax-seed and mustard poultices applied to the feet fulfil the indications pretty well.

For all temperatures in cases of burns it is good practice to avoid the use of all antipyretic agents. In the majority

of cases good tonic treatment should be begun early.

For the treatment of the burn itself there are two very popular remedies. They are carron oil and vaseline. But they should be discarded entirely in these cases. Under their use there is profuse suppuration, the room is filled with an odor that is very disgusting, the dressing must be renewed frequently, and the lesion does not heal rapidly. Iodoform ointment ($\frac{3}{4}$ j. to $\frac{3}{4}$ j.) is used in hospital practice often enough, but it is unsuited to the requirements of private work. The odor of the drug is not the sole objection to its use in these cases, however; for it is not difficult to poison the patient with iodoform, when the ointment is applied to deep or extensive burns. A number of cases of such poisoning have occurred in this hospital; but there have been no fatal results thus far.

The requisites of a satisfactory dressing for cases of burns may be enumerated as follows: It should be comfortable to the patient, diminish secretion from the affected part, require to be renewed only at long intervals, and it should promote healing. A large variety of dressings have been tried here, and now the general opinion is fixed upon certain methods, which will be given as briefly as possible.

Suppose that the lesion is one of the second degree. The affected region is covered with blebs of various sizes. These blebs are cut open with a scissors and evacuated. The detached epidermis is cut away carefully. Leaving the epidermis in situ after evacuation of the blebs does not seem to offer any advantages, and sometimes such practice retards the healing process. While these manipulations are in progress, the affected member should be irrigated with some antiseptic solution.

Bichloride of mercury dissolved in water (1 2000) has been used here very extensively for this purpose. It is too corrosive in that strength, and causes many patients to suffer indescribable agony. I have seen a patient in convulsions on account of the pain, in spite of large hypodermics of Magendie's solution. There are many patients, however, who will not complain of the corrosive mercury. Used upon extensive burned surfaces, carbolic solutions may give rise to poisoning, which should, of course, be avoided in such cases above all others. And, furthermore, they are irritant, and give rise to a large secretion of serum. Tursché's antiseptic fluid, which contains boracic acid five parts, salicylic acid one part, to water five hundred parts, is not very irritant, and is perfectly effective. It is the best solution for this use. The burned surface is irrigated with that solution and washed gently with sponges. Having thoroughly cleansed and having rendered the burned region as aseptic as possible, we dust upon it a layer of subnitrate of bismuth thick enough to thoroughly protect the part. On this four or five thicknesses of carbolized or bichloride gauze should be wrapped gently. Over all some antiseptic cotton is placed in a thick layer, and bound on gently with a bandage. This dressing will remain perfectly sweet for a week or two. Should serum come through it after a day or two, we cover the discharge with more cotton and a bandage. The part is examined after a week or two, according to the size of the burned district. Usually at the end of one week the burn is examined and found healed throughout. Should a second or a third dressing be required, it is applied under the same rules as the first. It is possible to cite a large number of such cases, and give the details of their

management, but it seems to me unnecessary to do so.

Burns of the second degree about the face are very satisfactorily treated with a saturated solution of bicarbonate of soda in water. That is applied by making a mask of sheet lint for the burned district, which mask is kept constantly wet with the solution. The blebs and epidermis are treated in these cases as in the others. Bismuth powder answers the purpose here very well indeed.

Burns of the third and fourth degrees require another sort of dressing. In these cases the bismuth dressing will become very foul smelling after three or four days. The discharge is much greater than in the former set of cases, and the bismuth salt is not antiseptic, so that the discharges are apt to undergo putrefaction, unless the dressing is renewed every second or third day. Cases of burns of the third and fourth degrees, if extensive, present a great variety of difficulties, and they often require a great deal of skill and patience on the part of the physician for their proper management. It is but to render them aseptic at the onset and to keep them so until they have healed. The Tiersch antiseptic fluid is efficient, and should be chosen for irrigating and washing the parts. The burn should be cleansed thoroughly of sloughs and other dead tissue. Then the dressing may be applied, and it should be of such a nature that it may remain undisturbed for a week or two. Boracic acid crystals may be powdered upon the lesion; or boracic ointment (3 j. to 5 j.) may be used spread upon antiseptic gauze. If boracic acid crystals are selected, then the lesion is thickly covered with them. Disinfected rubber tissue should then be applied in strips over the acid, and the antiseptic gauze and

cotton dressing applied as in cases of the second degree. Granulation is favored and promoted by this treatment, and cicatrization goes on satisfactorily. These large ulcerating surfaces should be skin-grafted as soon as the granulations are in proper condition for it. After the grafts have been placed upon the ulcer, the boracic acid may be dusted upon the part and the dressing made as before. Instead of boracic acid or the boracic ointment, a powder composed of equal parts of subnitrate of bismuth and iodoform may be used to accomplish the objects in view. I am inclined to think that this powder promotes healing more satisfactorily than any other dressing I have seen used in these cases. There is very little discharge, and cicatrization proceeds very rapidly.

In any case of deep and extensive burns, considerable time must elapse before healing is complete. The patient is confined to bed, and that alone is sufficient to lower his vitality. It is very necessary, therefore, that the discharges should be reduced to a minimum quantity. For the attainment of the objects in view, the closed dressings which I have described in this paper are the best that have been used in this hospital.

By the employment of them the mortality has been diminished, and the period of healing very much shortened.

Treatment of Acute Abscess.

PROF. SMITH, of the University of New York, has recently published in the *Æsculapian* his treatment of acute abscess, for which he claims in the case reported a saving of at least a month to the patient. He advises a similar procedure in carbuncles and furuncles, in fact wherever there is necrosed tissue. The method is as follows:

1. Wash well with soap and water and a flesh brush the skin at the seat of operation, then douche with a solution of corrosive sublimate 1 to 500.

2. Open the abscess with a knife treated with a solution of carbolic acid 1 to 30, the opening to be of a size to admit the nozzle of a Davidson syringe.

3. Force out the contained pus by pressure, when it ceases to flow, introduce the nozzle of the syringe, well disinfected, the edges of the wound being held firmly around it, and distend the cavity to its fullest capacity with corrosive sublimate solution, 1 to 5,000.

4. Force out the injected fluid by pressure.

5. Repeat this injection as often as may be necessary until the water flows away quite undischarged.

6. Lay the cavity open to its full extent, keeping up irrigation with a corrosive sublimate solution 1 to 2,000.

7. Cut away all shreds of tissue, and scrape off gently any granulations that may be upon the living surface of the abscess by means of a curette, until a perfectly clean surface is everywhere apparent.

8. Ligature any small vessels that may be bleeding with carbolyzed ligatures, thorough irrigation being kept up with the corrosive sublimate solution throughout.

9. Close the wound with an uninterrupted suture, except at the most dependent point, where a small opening must be left for drainage.

10. Place over the drainage opening a disinfected sponge to absorb the discharge.

11. Sprinkle the external wound and adjacent skin with iodoform; cover the wound well with folds of gauze between which iodoform is well sprinkled; over the layers of gauze apply a dressing of borated cotton, and if in a limb, secure

all by a light plaster-of-Paris bandage. In the case reported, that of a man with abscess in the thigh, the result of injury, and large enough to contain a pint, and to get at which an incision two inches deep had to be made, the suffering and fever before the operation was considerable. Temperature, 103° F. The day after the operation the temperature fell to normal, and did not again rise to 100° ; the pain ceased entirely, the appetite returned, and he enjoyed sound and undisturbed sleep. The patient stated that from his recovery from the anæsthetic he had felt entirely well. The dressing was removed on the eighth day. The wound was entirely closed, and though there was some thickening of the tissues involved in the injury there was no tenderness. He could walk without pain or inconvenience, and there was a rapid subsidence of the swelling of the part.—*Boston Med. & Surg. Jour.*

Varicose Ulcers and Treatment.

Under this head DR. E. F. CONGER concludes an interesting article in the *St. Louis Cour. of Medicine* as follows:

Treatment: After thoroughly cleansing the whole limb with warm water and soap, having been careful to get the parts as dry as possible, I sprinkled the surface of the ulcer with dry calomel; over this I placed a compress composed of several layers of old, soft cotton cloth and then applied an ordinary roller bandage from the toes to the knee, which included in its action all the dilated veins. After this first dressing, the ulcer was dressed once a day by cleansing and applying to its surface a solution of carbolic acid and reapplying the bandage. After a few weeks the patient was discharged cured, and has so remained since.

I recognize three indications in the treatment of these cases:

1st. Cleanliness. The ulcer and surrounding parts should be kept as clean as possible, and I find that the old-fashioned plan of washing with warm water and Castile soap answers this indication as well as anything.

2d. Local remedies. From the nature of the disease I believe that stimulating applications should be made to the ulcer, such as calomel, weak solution of nitrate of silver, iodoform and remedies of this class. Iodoform, as a rule, will give the best results, especially if the ulcer is painful or irritable, for while it is slightly stimulating in its action, it seems to relieve pain and allay irritation. I am opposed to the use of salves and ointments, they are filthy and acrid, and I believe they do harm by the irritation they are certain to set up; then the majority of our remedies can be applied in powder or solution, either of which is, in my opinion, far preferable to the greasy, filthy, acrid salves and ointments.

3d. Pressure. Of all the remedies indicated in the disease, I believe well regulated pressure to be the most useful. By it we empty the dilated veins and stimulate their contraction. Pressure is also beneficial by stimulating the ulcer, causing absorption to take place, thereby removing the diseased materials and producing a healthy granulating surface.

Pressure to produce the best results must be applied evenly all over the parts to be included in its action, and so graduated that it does not produce pain or too much inconvenience. I believe the best means of producing pressure in situations where they can be used, is by the woven elastic bandages. In situations where these bandages cannot be used, strips of adhesive

plaster, carefully applied, can be made to answer the indication, but in any case, whatever material is used, the pressure should be equal over all the surface included.

Now a word with regard to the management of these cases after cure is completed. I advise my patients to wear the bandage when a limb is involved, for months, or even years, if there is indication of the return of the trouble, and I find that the bandage is almost certain to prevent its return.

Antiseptic Dressing for Wounds.

DR. J. S. PRETTYMAN, of Milford, Del., sends the following: For twenty years or more I have been in the habit of closing up all fresh wounds, that were clean or could be made clean, and that were not extremely ragged, with bandages kept well saturated in the following: \mathcal{R} . p. myrrh, \mathfrak{z} viij.; p. benzoin, p. capsic., \mathfrak{z} j.; ol. anisi, O.iv. M. Make a tincture, which I call *tinct. myrrh. comp.*

If the bandages are saturated with it they form, with the gum, a nice case all around and over the wound, and retain the parts *in situ* in an excellent manner. No treatment that I have ever used, or seen used by others, seems to me to be quite equal to this in the excellence of the results. It appears to keep down inflammation, prevent suppuration, pain and soreness, and greatly to promote the healing process. Lately I have improved the preparation as follows: \mathcal{R} . P. myrrh, \mathfrak{z} viij.; p. benzoin, \mathfrak{z} iv.; powd. capsic., \mathfrak{z} j.; alcohol, O.iv. M. Make a tincture, and use as above indicated.

This treatment of suitable wounds I can recommend in the highest manner. Twice a day the dressings should be saturated, and no change made in them

for a week, unless untoward symptoms make it necessary. When the dressings are to be changed, saturate them well with alcohol to soften the gum, so that the bandages will not adhere.—*N. Y. Med. Record.*

Apparatus for Lifting Patients from the Bed.

In the *Centralblatt für Chirurgie* (No. 14), DR. HASE, of Hanover, publishes an account of an apparatus which is apparently efficient, durable and easy of operation. It consists of an iron frame, two uprights, and a transverse; from the horizontal piece depends a movable horizontal bar, which is elevated or lowered by a cord at each end, which, after passing over pulleys, are wound up by a winch at the head of the bed. The patient's body is sustained by four broad bands, which are attached by curved steel rods to the horizontal bar; there is also a small padded one under the patient's neck. For convenience, efficiency, and comfort, this apparatus seems especially commendable.—*Ind. Med. News.*

Local Anesthesia.

DR. AP MORGAN VANCE (*Louisville Medical News*): So far as I can learn, the use of local anesthesia has been very unsatisfactory in the hands of many surgeons, and has fallen into disuse. For several months I have used it in all the smaller operations with the greatest satisfaction, and believe that failures heretofore are due to the fact that the attempt has been to completely freeze the tissues, hoping to gain sufficient anesthesia at the outset to last through the cutting operation. The difficulty being that frozen flesh is hard to cut, and about the time one gets to work the anesthesia has departed, or is deep

enough only to permit very superficial incision.

I have found ether the most suitable agent, the old method with ice and salt having the objection mentioned, that is, that one is compelled to completely freeze the part. Rhigoline is more volatile than ether but is much more inflammable. The method of applying the ether spray is the secret of success. The atomizer with two bulbs is better than the ordinary instrument with one, as with the former the spray is constant. The assistant manipulating the spray must understand the different steps of the operation, especially if it be complicated. The spray is thrown on the part for only a moment when the knife can be used, continuing the spray at intervals or constantly in the incisions, thus making the superficial anesthesia precede the knife to any desired depth, no pain being felt. The ether seems to have a hemostatic effect also, as less blood is noticed than in ordinary cases. The healing process goes on as well as usual, no retardation or other bad effect being noticed in my cases. I have done tenotomies under its influence on limbs affected with infantile paralysis, in which the circulation was very poor, without sloughing or other trouble. I have done many tenotomies in adults and children, the patient experiencing absolutely no pain.

I assisted Dr. Cheatham in the removal of an eye, in case of a man of forty-five, who suffered little or no pain. Another case with the same physician, in which tracheotomy was performed upon a man of fifty, with little complaint.

At the City Hospital clinic a fibrous tumor as large as an orange was removed from a man's sacrum, the incision being six or eight inches long, with pro-

longed dissection on the sides of the growth. This patient did not feel the knife, but complained of the ether running down over the anus and burning severely. This could be avoided in similar cases by using oil about the mucous orifice.

In a circumcision on an adult, recently performed, no pain from the knife was felt, but the same burning was complained of about the fundament.

In tapping the abdomen, hydroceles, abscesses, or any cases in which the trocar or aspirator is used, the pain is rendered *nil* by a moment's spraying over the point. In one case, the removal of a fibrous tumor from the dorsum of the foot, the dissection was so prolonged that the ether gave out and chloroform had to be given. The cutting done under the local anesthesia was painless, and the lady, a physician's wife, never tires of praising the spray, saying if she had a true feln, she would ride a hundred miles to have it operated under its influence.

VENEREAL DISEASES.

Teeth in Inherited Syphilis.

A. FOURNIER defines a syphilitic tooth as one whose development has been arrested in the intra-follicular state by syphilis. The results are arranged under four heads (*Boston Med. & Surg. Journal*) Dental Erosions, Microdontism, Dental Amorphism, Vulnerability. Dental erosions are of many kinds. They consist of a more or less grooved or pitted condition of the enamel. The most important from a diagnostic point of view is the curved border of the incisors, to which the name of Hutchinson is attached. Fournier does not feel

quite sure that other diseases may not cause this. (Magitot, in a paper read before the last International Medical Congress, stated that these grooves were caused by eclampsia.) The other erosions are not of much diagnostic value, as many other diseases may produce them.

Microdontism.—This is a diminution in the size of the teeth. It is never a characteristic of the entire denture, and is usually confined to a single tooth standing among well-developed neighbors.

Dental Amorphism.—This shows itself in several ways: (1.) Some tooth, a canine for example, takes the form of an incisor. (2.) Additional cusps may appear; the first molar often has a well developed cusp on the side. (3.) The incisors take the form of axe blades, the crown being much too large for the necks. (4.) One or more teeth lose their characteristic form, and appear as irregular masses of enamel and dentine.

Vulnerability.—The statements which the writer makes here are too vague to be of any diagnostic value.—*Weekly Med. Review.*

Deafness in Syphilitic Tabes.

From *L'Union Méd.* we learn that Dr. P. HERMET, in an article on this subject, draws the following conclusions: 1. Deafness in syphilitic tabes is due to a deep lesion. 2. Its evolution is very rapid, and it may be considered as a symptom of the preataxic period. 3. It is an element in making a diagnosis, and when one observes sudden deafness in a syphilitic, without apparent lesion, other symptoms of locomotor ataxia should be carefully looked for.—*Med. & Surg. Reporter.*

Massage in the Treatment of Stricture of the Urethra.

The difficulty of passing a sound in stricture of the urethra following gonorrhœa depends, in the majority of cases, not so much upon the simple narrowing of the urethra itself as upon proliferation of the connective tissue in the surrounding parts. This hyperplasia of the connective tissue occurs in irregular patches about the urethra in such a way as to render the canal tortuous, thus increasing the difficulty of passing an instrument to the bladder. Dr. GEZA V. ANTAL relates a number of cases (*Centralblatt für Chirurgie*), in which he succeeded in inducing absorption of this hyperplasia by massage. The duration of each sitting was from eight to ten minutes, and the massage was repeated daily. Massage of the pendulous portion of the urethra presents no difficulties, but that of the membranous and prostatic portions is possible only through the rectum. Internal massage by means of the repeated introduction and withdrawal of a sound, as recommended by Bardinet, does not commend itself to the author. It is only possible in those cases in which the stricture is already permeable, while v. Antal's method is of especial value precisely in those cases in which the urethra will not admit of the passage of a bougie. Further than this, internal massage acts only upon the thin layer of tissue immediately surrounding the urethra, while the external method causes the entire hyperplasia to disappear. The author thinks that in many cases massage will be used in preference to urethrotomy.—*Med. Record.*

Buboes.

TAYLOR employs phenic acid as an injection to abort buboes. He reports

twenty cases in which he obtained a sure and remarkable result. In the last seven years he has treated thus nearly fifty cases of various forms of lymphangitis both specific and non-specific. Where he operated before the formation of pus, progress was immediately arrested and pain soothed in a few minutes; this method consists in injecting 10—14 gtt. of phenic acid directly into the inflamed gland.—*L'Union Medicale du Canada*.

The Treatment of Scrofulous Buboes.

Dr. LHUILLIER ("These de Paris"; "Bull. gen. de therap.") treats of a variety of inguinal bubo which occurs in scrofulous persons between eighteen and thirty-eight years of age, and appears to result most frequently from excesses in walking or in venery, which cause engorgement of the inguinal glands and favor the localization of scrofulous disease in them, often quite independently of any other scrofulous manifestation. Syphilis also favors the occurrence, and it is then termed syphilo-strumous adenitis (*adenite syphilo-strumense*). Strumous adenitis calls for a general anti-scrofulous treatment, such as cod-liver oil, phosphate of lime, wine of cinchona, and especially preparations of iodine in small doses extending over a long period. During the stage of induration, local treatment is apt to prove fruitless, although applications of tincture of iodine may do a little good; when fluctuation is evident, however, there should be no hesitation, but the abscess must be opened freely, antiseptically, and with Paquelin's cautery if practicable, and an effort made to destroy the wall. If the patient declines to submit to the latter procedure, the cavity may be dressed with tincture of iodine or with iodoform. In the syphilo-strumous form the treatment is

the same, but softening may be hastened by the use of mercurial plasters.—*N. Y. Med. Jour.*

Warts of Genitals.

Dr. CADELL says that warts of the genitals treated with chromic acid in the proportion of 100 grs. to 1 oz. of water, disappear with marvelous rapidity and with but little pain.—*Louisville Med. News*.

The Multiple Wedge Principle in the Treatment of Organic Strictures of the Urethra.

In a paper with the above title, read before the American Surgical Association at its recent meeting in Washington, and published in the *Jl. of the Amer. Med. Asso.*, the author, Dr. JNO. S. COLEMAN, of Augusta, Ga., comes to the following conclusions:

1. That in the treatment of organic strictures of the urethra, urethrotomy whether internal or external, and also the method by divulsion, are attended with serious risk to the patient on account of hæmorrhage, pyæmia and uremia.

2. That strictures treated by these methods are no less liable to recurrence than those treated by gradual dilatation. Indeed, unless followed by persistent dilatation they are subject to early relapse.

3. That gradual dilatation of urethral strictures, though of slower progress in the beginning, is almost entirely free from danger, more permanent in its results, and upon the whole the shortest and most perfect method of cure.

4. That in the treatment of tight urethral strictures the *Multiple Wedge Principle* devised by the writer, viz.: That of introducing side by side and one at a time successively a number of

filiform bougies, whether applied to the interrupted or the continuous method, offers to the surgeon the easiest, safest and best method for effecting the solution, or *absorption* of the inodular tissue, and for removing the obstruction.

Injection for Gonorrhœa.

R. Acid. carbolic (cryst), 3 j. ; ext. hamamelis ; aq. rosæ, 2a f 5 viij. M. As an adjunct to modify acid urine prescribe : R. Potas. acet., 3 v. ; ext. buchu, f 5 ij. ; tinct. hyoscyam. ; aq. anisi, aa 3 j. M. Sig. : Teaspoonful four times a day.—*Med. World.*

DISEASES OF THE SKIN.

New Treatment of Psoriasis.

Dr. H. B. FAY, of Washington, sends us the following translation : Dr. Grellety (de Vichy), in the *Rev. med. de Toulouse*, of the 15th June, 1884, after speaking of the disadvantages of other drugs used in psoriasis, thus writes concerning the value of chrysophanic acid, as used in the Hospital of Saint Louis.

The irritant properties of the acid can fortunately be prevented by making a mixture to which he gives the name "traumaticine." It is simply a 10 per cent. solution of gutta-percha in chloroform, which forms a protective coating much more pliant than collodion.

The affected part is first washed with soap and water. Then immediately with a brush, a deep yellow solution in the proportion of 10 grammes of chrysophanic acid to 80 grammes of chloroform is applied. Evaporation will at once take place, and then the protective covering of "traumaticine" should be applied as a second coating.

When pressed for time the two solu-

tions can be mixed, but this is not so advantageous as the other plan. It suffices to continue the applications two or three days. The part to which the mixture is applied becomes more and more white in color, during the space of three to four weeks, sometimes even much sooner. This is the general way in which the curative effect shows itself. It may also be seen in an erythema, encircling the layer of psoriasis, and indicating a speedy cure.

In this treatment the patient can go about his daily occupations. The preparation does not diffuse any bad odor, nor does it stick to the clothes. And when we add to these advantages the fact of its very easy and simple application, its equal value in any variety of psoriasis, there being no internal medication ; and its undoubted efficacy, practitioners will be glad to avail themselves of it.

Salicylic Plaster for the Removal of Thickened Epidermis.

Dr. J. C. OGILVIE WILL, surgeon to the Aberdeen Royal Infirmary, writes to the *British Medical Journal* that, having had his attention drawn to the value of Beiersdorf's salicylic plaster in the treatment of cases of thickened hydermis, by its having been mentioned by Dr. Thin, at a recent meeting of the Clinical Society of London, as recommended by Unna, of Hamburg, he (Dr. Will) employed it in the case of a man who had a peculiar affection of the orsum of the foot, the whole part of which was rough, brown and warty-looking, not unlike the hide of a hippopotamus. The overgrown epidermis was firmly attached to the underlying derma, as was shown by the occurrence of bleeding when an attempt was made to detach it, and the trouble was stated to have existed for two months. The af-

fectured part was strapped with the plaster, cut into strips, and at the end of three weeks it was found nearly cured. The application was then repeated to the portion that remained warty, and in ten days more the entire skin of the foot was perfectly normal.—*N. Y. Med. Jour.*

Salicylic Acid in the Treatment of Lupus.

Dr. J. G. MARSHALL says in the *British Medical Journal*: I have for some time employed salicylic acid in the form of ointment, as a remedy for eczema of the scalp and impetigo contagiosa in children, with the most satisfactory results, cases that had defied all other treatment yielding rapidly to its agency, and I have been induced to make a further trial of it in other skin affections.

By the kindness of Mr. Rigby, Surgeon to the Doncaster Infirmary, I was permitted to employ it in a very bad case of lupus exedens.

The patient, a woman about twenty-five years old, had her face terribly disfigured, the ulceration having destroyed one ala nasi, the whole of the cheek and eyebrow having been involved. She had been in the hospital before, and had improved under treatment with Donovan's solution and a visit to Harrogate. But on her return, though she was kept under treatment and observation, fresh tubercles developed, and the parts that had cicatrized soon became again involved, and she was readmitted to the institution. I first tried an ointment of fifteen grains of the acid to an ounce of vaseline, which was of no use; I then increased the strength to a drachm, and then to one drachm and a half to the ounce.

The ulcers soon began to heal, no fresh tubercles appeared, the cicatrices

became soft and lost their shiny, unhealthy appearance, and the skin of the face is now almost sound. She was previously taking a mixture of Donovan's solution and the liquor ferri dialysati. But as this had been without apparent benefit, I think it fair to give the credit to the external remedy. I have not heard of salicylic acid being employed before in the treatment of this disorder, and its action seems very satisfactory, especially as it does not seem to cause much irritation.—*Med. Med. Journal.*

DISEASES OF THE EYE AND EAR.

Boroglyceride in the Treatment of Suppurative Inflammation of the Middle Ear.

DR. A. M. ROSEBERY (*Med. News*):—The point was emphasized that suppurative inflammation of the drum-cavity is a disease that pre-eminently calls for antiseptic treatment. The indication is to keep the tympanic mucous membrane constantly bathed in a solution which, while it is antiseptic, is not irritating, and while it is gently astringent, it does not form coagulations with the secretions. Solutions of boroglyceride in glycerine seem to meet these indications better than any known antiseptic. Finely pulverized boracic acid has been used with much success by Bezold and others, but, other things being equal, a fluid, at least on theoretical grounds, would seem to be better adapted to the *mucosa* than a powder, however finely it may be triturated. Boracic acid, moreover, does not supplant, but simply assists other methods of treatment, whereas the boroglyceride, at least in the hands of the author, not only destroys all fœtor and quickly arrests the discharge, but it also de-

stroys polypoid granulations without resort to caustics. Boroglyceride is prepared by heating together in an evaporating-pan, two ounces of boracic acid and three ounces of glycerine, the acid being added gradually, and the heat continued until the mass is reduced to exactly three and one-third ounces, or two-thirds the original weight. On cooling it is an amber-colored, vitreous mass, which is very friable and easily broken when sufficiently evaporated. It is readily soluble in glycerine, but much less so in water. It is used dissolved in glycerine—the treatment commenced with a fifty per cent. solution, and the strength gradually reduced as the discharge diminishes. The treatment is largely intrusted to the patients, they being seen but twice or three times a week, when the meatus and tympanic cavity are thoroughly freed from all secretions by means of syringing with a warm solution of boracic acid and Valsalva inflations, or the use of an Eustachian catheter. The meatus is half filled with the boroglyceride (warmed) and the air forced through it by Valsalva inflation, or the catheter. The tragus is also pushed backward and inward, so as to force medicament into the middle ear. The boroglyceride is kept in position by means of a plug of absorbent cotton, or borated cotton soaked in vaseline. The patient repeats the process as well as he can, night and morning, at home. By this treatment it is claimed that the patients can be discharged cured in less than half the time required by the usual methods.—*Philadelphia Medical News.*

A New Reflecting-Material for Mirrors.

SCHOELER directs the attention of the profession to a new material for

coating mirrors which has been discovered by Mr. Lohmann, of Berlin. It is a platinum preparation, and glass mirrors coated with it possess the property of simultaneously reflecting and allowing rays of light to pass through the mirror. The color of the coated glass resembles somewhat that of the smoked glass of the opticians. The reflecting powers of these mirrors as yet have not been investigated. Perhaps there may be some useful application made of this material in the construction of ophthalmoscopic mirrors.—*Klinische Monatsblätter.*—*Med. Times.*

Operation for Strabismus.

It is not always easy to decide at what time the operation for strabismus should be made. The effort which Dr. J. HOCK, lecturer at the Vienna University, recently made (*Deutsch. Med. Z.* p. 49, 1884) to determine the time best adapted for this purpose, throws for the first time some light on this important subject. H. has come to the following conclusions. The operation should be performed :

In cases of convergent strabismus—

1. Immediately after the first appearance of squinting, *i. e.*, within a few hours or days.
2. During the stage of periodical squinting.
3. As long as regular diplopia is manifest.
4. In cases of relative squinting at any time.

5. In constant, inveterate squinting it is all the same when the operation is performed, its purpose being but cosmetic.

In cases of divergent strabismus—

1. As long as regular diplopia is present.
2. During the stage of relative squinting, but with the above limitations.
3. In cases of exclusion if the patient demand the operation.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fracture of the Lower End of the Radius.

Dr. R. J. LEVIS : The ordinary fractures of the lower end of the radius, produced by falls on the extended palm of the hand, are situated at from one-quarter to three-quarters of an inch above the articular surface, and are transverse in direction. The characteristic deformity of the fracture, as originally described by Colles, is correct, but he erred in locating it at an inch and a half above the carpal extremity of the bone.

The theory of the fracture as described by Barton, "a quite small fragment broken from the end of the radius on its dorsal side," has not been verified by clinical experience or by pathological observation, and is not in accordance with the true mechanism of the production of the fracture.

The force which produces the fracture is, for the most part, transverse to the long axis of the bone, and tends only to produce transverse fracture. Violent over-extension of the hand is the important factor in its production, and the bone breaks immediately above its long ligamentous connection with the wrist and hand. Force transmitted through the anterior carpal ligament is the immediate cause of the fracture.

Impaction, to a small extent, may occur by the posterior edge of the upper fragment being driven into the cancellated structure of the lower fragment, but it is not an important complication, and should not prevent co-aptation.

Comminution is usually vertical splitting, and is caused by the same mechanical action as that which tends to produce impaction.

The displacement of the lower fragment backward and upward can always

be overcome by strong longitudinal traction associated with forced flexion ; and, in uncomplicated cases, the fragments when completely reduced will remain in apposition without any retentive apparatus.

When comminution by vertical splitting exists, and the fracture has been produced by great force, rupturing the surrounding dense structures, apposition may usually be maintained by keeping the wrist in a state of flexion, with the aid, sometimes, of the pressure of the dorsal pad.

The unfortunate sequences of this fracture, as generally treated, are due to *imperfect primary reduction of the displacement, and the want of proper retention in apposition*. The usual long-continued impairment of function of the wrist and hand, and the painfulness which generally follows, are not due, as asserted by most authorities, to inflammation in the sheaths of the tendons, but *simply to pressure and irritation caused by the unreduced fragments*. That such impairment of function and suffering result from the ordinary incorrect treatment of the fracture by surgeons generally, nearly all surgical authorities attest.

Many years ago, whilst endeavoring to investigate the cause of the usual bad sequences of the fracture under consideration, I recognized its almost uniform position and direction, and concluded that its transverse direction, at that, the thickest part of the bone, could not be produced by longitudinal force, as had generally been taught. Examination of a number of cases of chronic deformity following the fracture, and of many museum specimens, demonstrated the fact that the mechanism of the fracture had not in the treatment of those cases been understood, and that the fragments had never been brought to proper

apposition, and thus deformity, with its attendants of more or less suffering and disability, had continued through the lives of the patients.

I do not deny that fracture of the lower end of the radius may be produced by varied, direct and indirect forces, and consequently show as much variety in its mechanism. But the form of fracture which is of most frequent occurrence, presenting the familiar characteristics, and which in its results, as ordinarily treated, is truly the opprobrium of the surgery of fractures, is a simple transverse fracture, very near to the carpal end of the bone, can readily be placed in apposition, and should not be followed by deformity or permanent disability. I have clinically taught and practiced on these principles since the year 1861, and have asserted them in an address before the Medical Society of the State of Pennsylvania in 1874, and again in a paper before the same body in 1879.

The accompanying cut, Fig. 1, is from a cast taken from a recent case by Dr. Harte, one of the resident surgeons of the Pennsylvania Hospital, which well shows the characteristic deformity of the usual transverse fracture of the lower end.

The schematic outlines, Fig. 2, represent the relative position of the fragments.

The usual errors in the treatment of this fracture are in not recognizing the position and direction and the peculiar displacement of the lower fragment, and in not producing a correct apposition of the fragments. There is also the customary error of endeavoring to treat a fracture of a curved portion of bone by a straight surface of splint, which tends, after complete reduction, to again displace the lower fragment backwards. A pad fitted to the anterior radial curva-

ture may be placed on a straight splint, but it is liable to slip out of position, and its action to be the reverse of what it is intended to accomplish. The

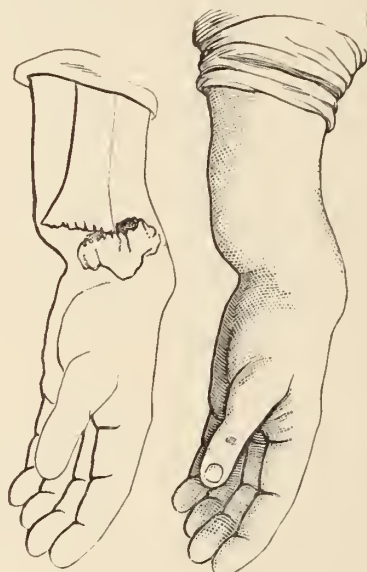


FIG. 2.

FIG. 1.

moulded splint has the merit of following the curve of the anterior surface of the lower end of the radius, and the imbedding of the wrist and hand in corresponding portion of the splint secures the curve in its proper position with reference to the fracture.

The fixation of the wrist and hand in a state of slight flexion obviates the tendency of the lower fragment to upward and backward displacement. The moulded splint is of flexible metal, so as to be comfortable to any fleshy or attenuated forearm. It is supplied by all the surgical instrument makers.—*Leonard's Illustrated Medical Journal.*

Treatment of Fracture of the Clavicle.

Dr. I. W. CHISHOLM (*Col. Med. Jour.*):

Being called to attend Mrs. Rev. B. (who had fallen down stairs), I found upon examination a fracture of the right clavicle—towards the acromial

extremity—and knowing from past personal experience (and also from the experience of other members of the profession) the difficulty of adjusting a bandage so as to hold the fractured ends in juxtaposition, the thought occurred to me of trying the following plan: Placing a small ball of candle-wick and pad in the axilla in the usual manner, then taking an ordinary muslin bandage, about $3\frac{1}{2}$ or 4 feet long, and passing this around and underneath the axilla and drawing it firmly upward against the axillary pad; then crossing the two ends of the bandage on top of the injured shoulder (having placed a compress at the seat of fracture), and then taking one end of the bandage and passing it across the back and around and underneath the axilla of the uninjured side and across the chest, and drawing it tightly and uniting the two ends. Then placing the arm in a sling supported by a band passing from the sling upward and over the seat of fracture and across the back, around and under the axilla (of the uninjured side), and across in front of the chest to the sling, and securing it there. Then taking a small, firm band of muslin, and securing it to the sling at the elbow and fastening the other end to the band across the back.

The advantages I claim for this appliance are its comparative simplicity, the material being always at hand for construction, the fractured ends being doubly secured, by pressure being made on them by both the bandage and the band of the sling, and also the shoulder being doubly supported by the axillary pad and the band-strap.

In the case in which I tried this appliance, the bone united without any appreciable deformity whatever, it being impossible to discern at what point the fracture occurred.

I am not able to say whether this appliance will prove equally successful in every case in which it may be tried, but this I think I can confidently say, it has all the advantages of at least many other appliances, without some of the objectionable features; among which I might mention: "costliness," difficulty of mechanical construction, requiring the surgeon to keep them constantly on hand, unless within reach of the "instrument maker;" and another, the uninjured side is not required to pay penance by being bound, and its freedom of motion to a great extent restrained, for the misfortune of its fellow, which advantages are worthy of at least some consideration on the part of the members of the profession.

Fracture of the Spine in the Lumbar Region; Death from Tetanus.

Dr. H. FLEISCHNER presented a specimen with the following clinical history: The patient, a powerful, robust man, a roofer by occupation, seven years ago fell from a height of thirty feet, striking with his feet on some stones. He sustained a complete comminuted, but not compound, fracture of the tarsus, also fractures of the sternum, two ribs, and the left forearm, and an injury of the spine, the exact nature of which could not be determined at the time. His condition was dangerous, and early death was anticipated. There was paralysis of the left lower extremity. For two or three days his bladder was emptied by the catheter, and his rectum by enemata. Then he commenced to improve, but recovery advanced very slowly. Hemi-paraplegia, affecting the right lower extremity, persisted. His condition was a painless one for a year. Subsequently he suffered greatly from neuralgia, and became addicted to the habitual use of opium. He would inject

hypodermically, during the paroxysms of pain, six, eight, or ten syringefuls of a saturated solution of morphine at once. His appetite was good and his general condition excellent. He was hopeful, and expected restoration to health. Last Wednesday evening he experienced difficulty in deglutition. Thursday morning he complained of pain in the back of the neck, and was able to swallow only on making considerable effort. It was clear that he was suffering from tetanus. In the afternoon there was marked emprosthotonus. Enemata of chloral were administered, but he did not sleep. Friday morning he had very violent spasms. He had had none before. At 6 A. M. his temperature was 103° F., pulse 110, respiration irregular; sometimes slow and sometimes fast. At 10 A. M., temperature 105° , pulse 140. He had been taking two grammes of chloral every two hours and had taken four grammes during the morning. He was able to open his mouth slightly, and a little beef-tea was given which he swallowed more easily than before. His breathing at this time was harsh and stridulous. Suddenly there was a relaxation of the spasm, and he died at once. Five minutes after death the temperature was 108° .

Dr. Fleischner presented the four upper lumbar vertebræ from this patient. The spinal curve in the specimen was in the wrong direction. The right inferior articular process of the second lumbar vertebræ was displaced and enlarged. There was no intervertebral foramen between the third and fourth vertebræ on the right side. There was enlargement of the neural arch, with trabeculæ of new osseous tissue inside the vertebral canal. The meninges were œdematous and adherent to the vertebræ, and contained bony plates. The intervertebral cartilage between the

second and third vertebræ on the left side was reduced to a mere trace; on the right side it was replaced by bony proliferation, and there was ankylosis of the adjacent vertebræ. There was no intervertebral opening on this side, which accounted for the paralysis. The cord ended lower down than usual, but above the seat of injury. There were bony deposits between the nerves and membranes lower down.—*N. Y. Med. Jour.*

Gun Shot Wounds of the Intestines.

One of the most important papers which was read before the American Medical Association, if not the most important, was the paper by Dr. C. T. PARKES, Professor of Anatomy, at Rush Medical College, Chicago. It was abundantly illustrated with diagrams and pathological specimens. The object of the paper was to elucidate the problem associated with wounds of the alimentary canal, but especially of the small intestines. Hitherto the uncertainty of the action of the medical attendant has only been excelled by the uncertainty of the diagnosis, and the certainty of death following on the expectant treatment. The result of Dr. P.'s observations, however, will lead to more active measures, at any rate in certain class of cases. We have endeavored to seize the general scope of the paper in the lines which follow, and our readers can thus judge themselves of its value:

It was deemed unnecessary to detail each case, but attention was first directed to the resulting hemorrhage as the most common and certain cause of death.

In the abdominal cavity, hemorrhage is practically always fatal; from large vessels immediately; from small, though less rapidly, scarcely less fatal. The in-

terior of the abdomen favoring hemorrhage both by the looseness of the tissue and absence of the peculiar influence of the atmosphere. As a matter of fact, the abdomen is always found filled with blood, and when first opened the blood is seen still flowing, but a marked change is developed by the influence of exposure to atmosphere. The small arteries and veins stop when completely exposed. If any orifices are allowed to remain closed only with clots and the whole returned into the abdominal cavity, the clots soften and the bleeding recommences. Consequently, all bleeding vessels must be diligently sought and securely ligated.

Early in the investigation mortification having occurred in a part of the alimentary canal after the ligation of two mesenteric arteries, observations were made to determine whether that was due to the mere ligation of the vessels of certain part, but it was found that anastomoses were so abundant that collateral circulation was soon established.

The track of the bullet was shown to be as uncertain in the relatively soft parts of the abdomen as when it encounters the more solid structures, and that a bullet of 22 calibre sometimes made a very large wound, whilst one of 44 made a very small one. To support the statement that no opinion based on the points of entrance and exit of the bullet as to the organs which may be injured was of any value, the case was cited in which a bullet entered the abdomen on the right side, two inches from the mid-line, furrowed the peritoneum, was deflected by a knuckle of intestine, so that it passed outward through the abdominal wall to the left side of the mid-line, re-entered the abdomen and was again deflected by another knuckle of intestine, when it

made its exit three inches to the left of the mid-line, thus passing through the abdominal walls four times! Another bullet took an irregular course through the stomach. Two passed through the abdominal walls, the entrance being five and six inches apart, without wounding the intestines. One did not effect a passage into the cavity, but the concussion resulted in a bleeding spleen which lay beneath the bullet. The intestines were always wounded when the track lay through the space they occupied. The wounds in the intestines were sometimes so close together that one resection embraced several wounds, completed the necessary operation. Sometimes they were far apart and the damage done by each perforation was great and three or four resections were necessary. The entrance and exit of the bullet into the intestines themselves showed great diversity:—sometimes passing straight through;—merely cutting off the mesenteric junction;—just passing through the prominent part of the knuckle of intestine;—sometimes traversing the intestinal tube for various lengths. One case exhibited ten perforations in eighteen inches of tube.

Extravasation of the contents of tube occurred in every case where the tube was wounded. This corresponded to the author's observations relative even to the use of the medium size aspirating needle in the relief of flatus in the human intestines, the flatus has been removed but the patient has died nevertheless. The certainty of a fatal result associated with extravasation constitutes a forcible argument in favor of surgical measures in such cases.

Among the extravasated material were worms, numerous both in kind and numbers.

In the mode of operation long incis-

ions were made in the mid-line regardless of the external bullet wound. Snap forceps were used for the control of hemorrhage wherever it was found; this was always found necessary whenever the mesenteric juncture was wounded. Contents of the bowels pressed back out of the way and the lumen temporarily closed with the fingers of assistants, if possible. Intestines turned on to a warm moist cloth. Wounds of special organs sought and attended to—organ removed, if severely wounded, and ligated or stitched if only slightly wounded. The peritoneal cavity entirely freed from blood. The resections made, sutures inserted and intestines returned.

Special Details of Uniting the Intestines.—When several wounds occurred close together, one piece, even if it amounted to ten inches, was removed. Where the wounds were far apart separate sections were made. After a few operations it became evident that it was desirable to select the spot for the division of the tube where a mesenteric artery approached the nearest to it. In other cases sloughing seemed to occur. Immediately after the severing of the intestine a marked contraction of the circular fibres occurred followed by a rolling out of the mucous membrane. This rolling out of the mucous membrane increases the difficulty of inserting the sutures. After various devices it was found that it was best to proceed as though no turning outward occurred. Whenever a resection was made for a single bullet wound not affecting the mesenteric junction, it was found necessary to cut out a V shaped piece, the apex of the V being turned toward the mesentery. In simple abrasions of the intestines the integral parts of the peritoneal surfaces were brought together, thus converting the wound into a linear one. The same plan was adopted in

wounds of the stomach, and it evidently has a wide application relative to certain wounds of the intestines.

Wounds affecting the mesenteric border of the bowel were always the most serious and always required complete resection of the part affected. This particular part is also the most difficult to stitch neatly together. The re-inversion of the mucous membrane at this point is particularly difficult. The nature of the difficulty will be appreciated when it is remembered it is absolutely necessary to embrace in the suture both the peritoneal and the muscular coats, at the same time to avoid going through the intestine. This is the most difficult part in which to place sutures, it should always be sustained by three sutures. It was then found best to place one on the opposite side and then one half-way down on each lateral surface. The remainder are then easily kept.

Lembert's sutures were found the best. Lembert, however, used his sutures for small wounds and consequently required only a narrow part of the peritoneum to be brought into apposition. In these cases one-third of an inch was necessary. This method never failed to be followed by good union when properly applied with peritoneal surfaces around the entire circumference of the intestine. The sutures must not be too tight.

The treatment of the mesentery constituted a real difficulty and no plan proved altogether satisfactory. It was tied in sections and also united and fastened in close contact with the united bowel; the latter proved the better of the two. Another plan was later on in the experiments suggested, namely, that of leaving a small strip of the bowel adjoining the mesentery intact, merely stripping off the mucous membrane and then doubling upon itself and sewing it

together. This method promises good results. Sometimes large tracts of the intestine had to be removed, as the same care relative to hemorrhage in it has to be observed.

The external treatment was iodoform and oakum, the same being applied to the parietal wounds.

Deductions for Diagnosis and Prognosis.—That it is impossible to diagnose the nature of the difficulty inflicted in gun-shot wounds of the abdomen by an inspection of the entrance and exit of the bullet. That any perforations of the bowel, even a needle perforation, means extravasation.

That extravasation of the contents of bowel and expectant treatment means death.

Practical Points for General Guidance.—Never probe the bullet tract. In bandaging cover the wound with any favorite powder.

When there is reason to suppose the intestines are probably wounded make a long incision in the median line and explore. Turn out the whole of the intestines on to a clean, warm, moist cloth, examine and protect the wounded parts of the bowel as they are found.

Ligate every bleeding vessel.

Treat the large individual viscera, not included in the alimentary canal, by extirpating or stitching according to extent of injury.

As a matter of course everything to be done by the most approved methods in reach—time not being an unimportant element.

The Wounds Themselves.—In the stomach stitch up and give the appearance of an incised wound. The same kind of procedure can be adopted in small wounds and abrasions of the intestines and some of the large viscera. In wounds affecting the mesenteric junction of intestine always resect.

When several wounds occur, say within four inches apart, make one resection to cover the whole.

The treatment of the mesenteric stump requires further study, but has given the best results so far, when stitched to the points of union of the bowel.

The stitching of the bowel is best done by securing, first of all, the mesenteric junction by about three stitches, then the point opposite and two others laterally, the remaining stitches to suit convenience, one-eighth of an inch apart. The stitch must always include peritoneum and muscle but never go through the mucous membrane. The mucous membrane must be turned in and not cut off.—*Weekly Med. Review.*

Treatment of Nævus by a New Method.

Dr. H. O. MARCY, of Boston, in a communication to the *Archives of Pædiatrics*, recommends the following ingenious method of treatment of angiomatic growths, in order to avoid destruction of tissue and subsequent contraction and cicatricial deformity. He uses for the cure of a variety of vascular growths a suture which he has called "the shoemaker's stitch," since in it the ligature is carried, by means of a long needle set in a handle, in opposite directions through the same puncture, the eye of the needle being near to its point, which is without cutting edges.

Armed with the ligature, the needle is thrust deeply under and quite away from the vascular growth. The ligature is then detached from the protruding point, and the other end of the ligature threaded and then drawn out with the needle, which is reinserted close to the first puncture, and thus the process is continued until the entire mass is enclosed, and fixation is completed by a single knot. In this way uniform and

steady pressure can be attained, and maintained as long as desired. A report of a case is appended, of a large nævus on the chest, the action of the ligature being aided by a firm compress. It was also found necessary to make two parallel incisions, one on each side of the growth, in order to facilitate the operation and render the constriction less painful. Such incisions are not usually necessary, however. The ligature was removed on the fifth day. Now, two years after the operation, the result is perfectly successful, with but little cicatricial contraction.—*Med. Times.*

Liquor Arsenicalis in Nævus.

Dr. JOHN BLAIR reports a case in one of our foreign exchanges, where, after seven weeks use locally of this drug, the patient was entirely cured, and that without appearing to suffer any pain, except for a short time when the nævus was ulcerating. He had to stop the application on two different occasions, owing to severe gastric disturbance, which he attributed to the absorption of arsenious acid, and which ceased after a rest of two or three days.—*Med. & Surg. Reporter.*

The Essentials for the Safe Administration of Ether.

Dr. DAVID W. CHEEVER concludes an article on the administration of ether in the *Boston Med. and Surg. Jour.*, by giving the following essentials for its safe use: An empty stomach; a loose neck; a free abdomen; no corsets or skirt bands; removal of artificial teeth; an easy, semi-recumbent position; a sponge wrapped in towels for the ether; a gag, and forceps for the tongue.

When stertor occurs, the patient should be tipped forward, the cheek opened with two fingers, the tongue

drawn out, the fauces swabbed. To insure safety, the surgeon should hear every respiration of the patient.

Anæsthesia from sulphuric ether is of two forms:

1. Primary anæsthesia, which is a moment of confusion coming on after a very few inspirations. At this moment a felon can be opened without pain, and the patient wake at once.

2. Comatose anæsthesia, for prolonged operations. Ether may be given almost indefinitely. To relieve the hopeless agony of tetanus, I have had it administered for twenty-four hours.

If you would avoid asphyxia, nausea and headache, and be safe, use only the best and the purest anhydrous sulphuric ether.

Intra-Articular Effusion Treated by Injection of Irritating Solutions.

The Paris correspondent of the British Medical Journal says: M. LEON LABBE, at a recent meeting of the Académie de Médecine, sketched the history in France of the therapeutical treatment of intra-articular effusion by injection of irritating solutions. Gaz, a surgeon at the Cape of Good Hope, was the first to employ that method (1783). In 1830, Jobert de Lamballe injected barley-water, mixed with alcohol, into a joint affected with hyarthrosis. A few years latter, Velpeau and Bonnet, of Lyon, injected iodine into articulations. In 1839, Velpeau, after injecting iodine into a serous popliteal cyst, observed that the knee-joint became inflamed and swollen. Two years later, Velpeau purposely injected iodine solutions for the cure of chronic hycarthroses. In 1855, Bonnet, in his *Traité d'Iodothérapie*, published twenty observations on chronic hyarthrosis treated by iodine injections. The results of this method of treatment varied greatly. Sometimes

its effect is simply negative; sometimes the patient is cured, but the articulation remains stiff. Occasionally there is complete and permanent cure. Intra-articular injections have provoked suppurating arthritis. M. Gosselin, in his clinical lectures, has cited five cases of pyemia followed by death. In Germany, a treatment called the Schede system has been largely adopted in the last four or five years. The articulation is washed out with a three-per-cent solution of carbolic acid. In 1877, Rinne published a memoir on this method, and bore evidence to its efficacy and harmlessness. M. Boeckel, of Strasburg, has used it with great success. M. Labbé furnishes more evidence in its favor. In 1875 a patient, aged thirty-one, had hydarthrosis of the knee-joint. Blisters were applied and the joint was painted with iodine and finally placed in a permanent silicated bandage; the improvement which resulted was transitory. A puncture was made seven years after the effusion first appeared; a three-per-cent. solution of carbolic acid was injected into the articulation, and continued until the effusion was perfectly clear. The articulation became slightly inflamed, and the improvement continued until the effusion completely subsided. The cure remained permanent for twenty-one months after the puncture. Another cure is that of a man-servant, aged twenty-six. He had two attacks of acute articular rheumatism; one of the knee-joints afterward presented considerable effusion. Two years after the effusion appeared, a puncture was made, and carbolic acid was injected; the effusion reappeared. A second puncture, followed by carbolic injections and compression, resulted in a cure. Sixteen months afterward there is no sign of return of the disease.

VENEREAL DISEASES.

Treatment of Syphilis.

Dr. A. NEISSER (*Deutsche Med. Wochenschr.*): In connection with this much-disputed topic, the only positive rule which it is possible to lay down, is, that the treatment of syphilis should always be in strict accordance with what is known concerning the essential nature of the disease. As respects the latter point, our ideas within the last few years have undergone considerable change—or rather have become more settled. The most industrious and skillful investigations have hitherto failed in detecting the actual virus of syphilis, but I entertain not the slightest doubt that it is an organized product, and I regard the discovery of the syphilitic bacteria as merely a question of time. Thus far, their existence is only an assumption; yet on such firm grounds does this assumption rest that it must necessarily exercise an influence on our conceptions of the malady. And, in fact, all the peculiar features of syphilis—its infectivity, its symptoms, and its transmission by descent—can be shown to harmonize precisely with the theory of its bacterial origin.

This being regarded as settled, three questions come up for consideration in relation to our special theme. These are: When should the treatment of syphilis be commenced? What method of cure should we adopt? How long should the treatment be continued?

1. *When should the treatment of syphilis be commenced?* I reply—not before we are quite certain of our diagnosis. This may seem a mere truism, yet it is one which I am called upon to emphasize, in view of what we all know to be a very prevalent practice. There are many physicians who look upon every sore arising from sexual inter-

course as syphilitic, and proceed at once to attack it accordingly. This is the result neither of faulty diagnosis nor of recklessness, but of too strict an adherence to a certain general theory—the theory, namely, which regards the virus of the soft chancre as identical with that of syphilis, and the difference between the symptoms of the two disorders as caused merely by a difference in the affected tissues, or by some other accidental circumstance. Now, as between this opinion and that of the dualists, I have no hesitation in expressing my most decided agreement with the latter—i. e., with those who look upon the above-mentioned diseases as entirely separate and distinct, as caused by different poisons, and their co-existence in the same subject as due to a simple coincidence. And in renouncing the unitary conception of the disease, of course I reject also its legitimate result—the immediate treatment of all venereal ulcers. Nevertheless, instances are frequently encountered in which this immediate treatment, in anticipation of a certain diagnosis, is resorted to even by professed dualists. I refer to those cases where a soft chancre is succeeded speedily by an outbreak of genuine syphilis—i. e., after an incubation of three weeks, by first a primary sore, and then in due succession, by the other characteristic phenomena of the disease. But even this occurrence does not justify a departure from the rule I have announced, for it should be considered as really due to the combined operation of two different poisons, that of soft chancre and that of syphilis, whose germs have been accidentally deposited at the same time in the same subject, and both of which have run their typical course. Therefore (if we adopt the dualistic view) the existence of a soft chancre is not to be depended upon as affording

the slightest evidence that real syphilis is about to follow, or as constituting a sufficient ground for resorting to specific medication. This latter should be instituted only when unequivocal signs of syphilitic infection have manifested themselves. The observance of this precept will no doubt often result disagreeably for the physician, by obliging him to keep his patient for several weeks in a state of suspense and apprehension. This, however, is a something which must needs be endured until such time as the demonstration of the characteristic bacteria in the chancrous secretion shall enable us to recognize the disease at once, instead of waiting for the development of its symptoms. After this delay, the specific induration generally makes the diagnosis clear, when the affection is situated on the epidermis—as, for instance, on the lips of the urethral orifice. But when seated on the mucous membrane, especially that of the female genitals, it can rarely be identified as a primary syphilitic phenomenon, since here the formation of a sclerosis is anatomically impossible. In this case our decision must be postponed until time enough has elapsed for the supervention of constitutional symptoms.

An aid to diagnosis is often afforded us by the lymphatic glands in connection with the part first affected, whatever its location. These glands not unfrequently become indurated almost as soon as the primary sore itself, the difference in time being only that which is required for the passage of the bacteria from one situation to the other.

But whenever our diagnosis is made, or however we arrive at it, the same rule holds good—that our treatment of syphilis should begin just as soon as we are certain the disease is present. Guided, in this case, as already said, by our con-

ception of the bacterial nature of the virus, our path lies plainly before us ; we must, as speedily as possible, effect the destruction of the disease-producing germs. The simplest and most direct means of accomplishing this object would be by the immediate removal of the earliest focus of infection. Unfortunately, for the reasons given above, such prompt action is inadmissible. We must defer the procedure for about three weeks, until the nature of the complaint has been established by its visible manifestations.

But when these manifestations have occurred, is it not still possible to obviate all risk of constitutional contamination by destroying the chancre itself ? This is what was perseveringly attempted in a variety of ways, until the doctrine gained ground that the local affection was merely the expression of a general disease, and that, therefore, the removal of the former must necessarily be unavailing. It is only recently that the old-time theory and practice have been reverted to, as in full accordance with the bacterial notion of syphilis, and now we direct our efforts to the extirpation of the primary sore, in the hope of thus preventing at a single stroke, the extension of the mischief. That is, we regard the initial induration as simply the local focus of infection, as the centre in which the syphilitic virus is developed and from which it spreads, and consequently as the chief, if not the only, source of general contamination.

Staunch advocate though I am of this method, I must confess that its results thus far have not corresponded with our anticipations. Such excisions have been made in numerous cases, which yet have developed constitutional symptoms. How is this comparative failure to be accounted for ? On the ground, oftentimes, in my opinion, that the op-

eration did not succeed in thoroughly removing *all* the morbid germs; but left them behind, here and there, in sufficient quantity to bring about the general infection. But besides this, I believe that, in the majority of such instances, the excision has been made *too late*—constitutional contamination having already occurred, although undiscoverable by our present means of investigation. Despite these untoward results, I still regard the procedure in question as an advisable one, and I employ it myself in all cases where it is not forbidden by the localization of the sore on the glans, the corpus cavernosum, the lips of the urethra, etc. In my opinion it is recommended, in the first place, by the rapidity with which healing is established—especially under antiseptic precautions—and secondly, by the possibility (even if it is nothing more) that secondary symptoms may by this means be entirely prevented—a consideration in itself sufficient to justify a resort to so harmless and locally advantageous an operation. I will also suggest that, very probably, reasoning from theory if not from practice, the progress of the disease may in this way be rendered milder in cases where it cannot be entirely stayed.

On similar grounds, I am strongly in favor of extirpating the lymphatic glands when primarily affected, although this is a measure which cannot be so safely attempted by the general practitioner as the simpler one I have just referred to. In the case of a soft chancre, on account of its extremely infectious nature, the excision, if ventured upon at all, must be preceded by a thorough destruction of the specific virus, and accompanied by the strictest antiseptic precautions, if we would prevent the wound from becoming poisoned.

Finally, in deciding upon the feasibility of this operation, we must be governed by the circumstances of the individual case.

When excision is out of the question, or when we have reason to believe that general infection has already taken place, I would advise that constitutional treatment be at once entered upon. And here I must express my dissent from those teachings, emanating from the Vienna school, according to which such treatment may be wholly, or almost wholly, dispensed with. Sigmund, in particular, has reported that nearly forty per cent. out of his numerous syphilitic patients got along so well of themselves that they did not appear to require any constitutional treatment. This is opposed, however, to the experience of the French authorities, and particularly of Fournier, who found that the severest forms of secondary syphilis were manifested in those cases where the initial symptoms had been remarkably mild. We are not to conclude from hence that the disease showed increased malignity in its later stage, *because* the primary affection had been of an opposite character; the simple fact was that treatment during the earlier period being regarded as unnecessary, was completely neglected, and it is this neglect that must be held responsible for the subsequent aggravation.

This is only one of the numerous instances that might be adduced to show how little confidence can be reposed in statistics with reference to the complaint we are considering. If, in judging the issue thus raised between the above-named authorities, I take the side of Fournier, it is on theoretical grounds only—since, assuming syphilis to be a bacterial disease, I infer that it is best treated by means adapted to remove the micro-organisms and prevent their

reproduction without injury to the general system. It is my firm conviction that such an agent is only to be found in mercury, and therefore I do not hesitate to say that every syphilitic patient ought to be brought under the influence of that drug, as soon as the nature of his case is ascertained.

In view of the harmlessness of this remedy, the maintenance of a passive attitude in reference to the disorder appears to me to involve a positive sin of omission.

But it may be asked, why not rely upon mercury in those cases where there is only a possibility that syphilis may have been contracted—*i. e.*, in every form of suspicious erosion and ulceration? I answer that here, against the bare possibility referred to, must be weighed, the probability that the course pursued will result, not in the eradication of the malady, but in the temporary suppression of those symptoms by which alone its real character is made known, so that the latter will be merely disguised by a deceptive appearance of restored health. It is unnecessary to insist upon the dangers which may be incurred by the patient and his family through a mistaken or even a doubtful diagnosis under such circumstances. We must, therefore, adhere firmly to the principle proclaimed at the outset of these remarks: Never to resort to anti-syphilitic measures until we are assured that it is syphilis with which we have to deal.

2. *What Method of Cure should we Adopt?* I regard inunctions as the best means of obtaining the antisymphilitic effects of mercury. Mercurial baths I employ only when circumstances forbid the use of inunctions, or when the treatment has to be repeated two or three times successively in the same long-standing case. Muller and Stean's

solution of sublimate with soda, or the mercurial peptones, are preferable for subcutaneous injections. When properly prepared, the foramid, lately recommended by Liebreich, is advantageously employed in this way, by reason of its almost absolute painlessness, but has not yet been sufficiently tested as to its efficacy in preventing relapses. For internal use, I prefer corrosive sublimate in small doses. It is best given as a watery solution, with common salt and plenty of milk, so as to lessen its disturbing action on the stomach and bowels. The yellow iodide of mercury is much better tolerated by many patients, but is in great part passed off in the stools.

3. *How long should constitutional treatment be continued?* This question is easily answered as regards the cases characterized by frequent relapses. Here the use of mercury should be suspended at intervals depending upon the constitutional effects of the drug, the state of the patient's nutrition, etc.; it being also borne in mind that mercury loses its peculiar action when administered uninterruptedly for too long a period. This latter consideration led Fournier to formulate his so-called "alternate and intermitting method," according to which the mercurial treatment is kept up for at least one and one-half to two years, with gradually increasing pauses of from four to eight weeks each, during which iodide of potassium is substituted.

When the complaint has passed into the tertiary stage, iodide of potassium is the sovereign remedy—and it must not be given in too small doses. Experience, moreover, has recently established that a combination of this drug with mercurial inunctions is of special value in severe syphilitic affections of the brain and spinal cord. Here, too,

we should remember Fournier's maxim, "as well do nothing as not do enough," and administer the mercury freely.

But what shall be said of those cases in which the early symptoms are few and mild, and are apparently succeeded by a complete return to health? Does the disease in them remain latent and liable to break out at any time, or is it actually and permanently cured? To this question no general reply is possible, in the present state of our knowledge. No test can be applied, no sign discovered, which may serve as an unerring guide. This being so, I hold that every patient in whom the disease has thus manifested itself should be regarded as still a syphilitic and a fit subject for the mercurial treatment just referred to. This treatment, in short—assisted, when necessary, by iodide of potassium—I would employ in every case of syphilis, with but three exceptions, viz., when tuberculosis or severe scrofulosis coexists; when there is a decidedly anæmic or cachectic condition, and finally, when the form of specific disease presented is that known as "galloping syphilis." In this last, generally invigorating measures are alone called for, until the resisting capabilities of the organism have been so far restored as to admit of a return to direct antisymphilitic medication. Here as always, our plan of management and the doses we prescribe must be adapted to the patient's constitutional peculiarities, as well as the nature of his disease.

Aside from these special conditions, I believe that Fournier's method is that which is preferable in the greater number of syphilitic cases, and this belief is founded solely upon my faith in the bacterial origin of the disease.

It need scarcely be added that, in conjunction with specific medication, the patient's strength must be supported

by suitable nourishment and favorable hygienic surroundings. The lowering diet so frequently advised in the earlier stages is altogether a mistake, except in the case of over-fed and very plethoric individuals.

The long-continued mercurial and iodide treatment deserves to be considered, moreover, in relation to the hereditary transmission of syphilis. We know that when the disease runs its natural course, the liability to such transmission tends to diminish spontaneously at a certain rate; but this tendency may be decreased by the judicious administration of mercury. Now, since the degree of transmissibility has nothing whatever to do (apart from the effect of remedies) with the presence or absence of syphilitic symptoms, it follows that any course of treatment which depends upon the latter must be absolutely worthless, in this regard. Looked at from a kindred point of view, Fournier's plan of cure assumes additional importance when we consider that it demands not only a certain lapse of time between the infection of a subject and his marriage, but also the employment during this interval of vigorous therapeutical measures.

A word may be expected before closing in relation to Guntz's "chrom-wasser" treatment. This, in my opinion, does not possess the advantages claimed for it by its inventor. His own communications on the subject—especially his numerous clinical histories—are quite sufficient to prove that he is still far from having attained his object.—*Jour. Cut. & Ven. Diseases.*

Injection for Gonorrhœa.

R. Hyd. bichl., gr. $\frac{1}{2}$; ext. hydrastis canad., fld. $\frac{5}{8}$ ss.; aquæ ad., $\frac{5}{8}$ iv.

Pulsatilla in Acute Epididymitis.

Dr. L. E. BORCHEIM of Atlanta, Ga., in the *Jour. Cutan. and Ven. Diseases*, says: Numerous disappointments in the treatment of this disagreeable and painful affection by the usual methods and the perusal of a few brief articles published in the journals at various times by Piffard, Sturgis and Fox, of New York, have led me to employ, experimentally, the tincture of pulsatilla, and I am pleased to state, to my complete satisfaction, as in using this drug I found that not only was the relief its administration afforded more prompt than by the former methods employed by me (cathartics, poultices, rest, etc.), but that it completely did away with one of the most objectionable features of that treatment, namely, rest in bed.

The cases upon which I based these few remarks are twenty-four in number, all of which have been treated within the past eighteen months, and they were all in the acute stage of the disease.

Here we have a remedy which does not require so exacting a discipline, as I never found in all my cases any necessity for complete rest in bed, the only requirement being the wearing of a suspensory bandage, and taking of the medicine. The relief from pain usually takes place within three days. The preparation employed by me is the tincture of pulsatilla, the dose being two drops every two hours. No benefit is derived from the use of larger doses at longer intervals.—*Med. Herald.*

Local Antiparasitic Treatment of Urethral Blenorrhagia by Diday.

Lyon Med.—He recommends washing the urethra with a solution of Sublimat $\frac{1}{10000}$. The following directions must be strictly kept. 1. The solution must be brought in contact with every part

of the diseased mucous lining of the urethra. 2. The urethra must not only be filled, but considerably expanded. 3. The solution must be kept in for several minutes.

An irrigator with an elastic catheter is needed for the operation; the glans is compressed over the catheter, so as to retain the solution.

The strength of the solution must be increased gradually.—*St. Louis Med. & Surg. Journal.*

DISEASES OF THE SKIN.

Oleate of Chloral Comp. for Pruritus.

The writer has had the above compound prepared for pruritus ani, the itching of eczema and all other similar cases in which an itching exists which it is deemed expedient to allay temporarily until the means, employed for permanent relief, act. The compound is made by mixing together one-half drachm each of camphor and chloral and adding to this one ounce of oleic acid. This makes a clear brown liquid having the odor of camphor and it may be scented to suit the taste of the patient.—*St. Louis Cour. of Med.*

Escharotics.

Esmarch's painless caustic powder, for the removal of warts, tumors, etc., is composed of: \mathcal{R} . Arsenious acid, 1 p.; sulphate of morphia, 1 p.; calomel, 8 p.; pulv. gum arabic, 48 p. This is to be sprinkled on the cuticle daily. The surface should be denuded either with the knife or a blister. Canquoin's paste, for the same purpose, is made, according to M. Charles, by the following formula: \mathcal{R} . Chloride of zinc, fused, 10 p.; alcohol, 60°, 2 p.; wheat flour, 15 p. Rub the zinc chloride to a

fine powder, add the alcohol, rub again and incorporate the flour, strongly pressing with the pestle. As soon as the paste is homogeneous, spread with a roller or bottle into sheets about one-eighth of an inch thick, and after a few hours put into a well-corked bottle.

Latour's nitro-chloride of zinc paste, a most excellent escharotic, is made by dissolving 50 parts of chloride of zinc and 100 parts of nitrate of zinc in 80 parts of water. The solution is made by the aid of heat. When it cools, add to each 100 parts of the fluid 75 parts of wheat flour, and incorporate as in Canquoin's paste.—*St. Louis Druggist.*

Treatment of Chilblains.

Dr. FR. EKLUND says that in the treatment of chronic chilblains, characterized by discoloration, swelling and anesthesia or hyperesthesia of the part affected, he has found both local and constitutional treatment necessary.

The local treatment consists of topical applications, water, massage, electricity, etc. He recommends the following as an application: \mathcal{R} . Pulv. camphoræ, 1 p.; balsam. Peruvianæ, 4 p. M. Sig. Apply night and morning a few drops on a pad of carbolyzed cotton batting, fitting the part.

Each morning the feet are to be bathed in cold water (60° to 70° F.) ankle deep, for about four minutes. During this time each foot should be rubbed and kneaded for about a minute, and again after drying them thoroughly with a coarse towel. About an hour after each bath electricity should be applied, galvanic or faradic.

If ulcerations be present they should be treated daily with a saturated solution of carbolic acid in alcohol, or the following ointment may be applied: \mathcal{R} . Argent. nitrat., \mathfrak{z} xv.; balsam.

Peru., 3 lxxv.; vaselini, 3 v. M. Sig. Spread on carbolized cotton and apply twice a day.

When syphilis is known or suspected, constitutional treatment should be given with local application of unguentum hydrargyri and unguentum terebinthinæ resinosum. He recommends gymnastic exercises specially selected for the purpose of equalizing the circulation in the extremities, and insists upon perfect cleanliness and hygienic surroundings.

As prophylactic means, he recommends daily or semi-weekly ablutions of the whole body in cold water, keeping the air of dwellings, and especially bedrooms, pure and not too warm, woollen garments next the skin, and double yarn stockings.—*Therap. Gazette.*

Comedones.

For comedones (black-headed grubs) the following application is of utility:

R. Kaoline (potters' clay), 4 p.; glycerine, 3 p.; ac. acetic, 2 p. M. Sig.—Cover the part affected, with this paste, in the evening; after several days of this application, most of them come out by washing with pumice stone soap.

Freckles.

Freckles, or lentigo, may sometimes be made to disappear by an application of citric acid night and morning. The method employed by dermatologists, and attended with considerable success, is to apply a solution of corrosive sublimate, one to three grains to the ounce of water, or emulsion of almonds night and morning. Dr. Duhring reports the latter as the most satisfactory, and advises its application until a slight amount of desquamation takes place.—*St. Louis Med. and Surg. Journal.*

Skin Grafting.

Dr. WILSON, of Louisville, has used with success the inner membrane of a hen's egg for skin grafting. One egg will supply an indefinite number of grafts.—*Bost. Med. & Surg. Jour.*

A New Hair Dye.

The disadvantages attending the use of hair-dyes containing lead, and the positive danger attending their use, have induced M. NAQUET to search for a liquid which may be used for dyeing the hair and yet be innocuous. He describes, in the *Moniteur Scientifique* a dye which is said to have a progressive action, to produce all shades up to a deep chestnut color, and yet to be free from all deleterious action. The base of the dye is bismuth. The following is the formula. Bismuth is dissolved in the smallest possible quantity of nitric acid—nearly three parts—and to this liquor a solution in water of tartaric acid, equal in weight to one-fourth of the bismuth used, is added, and then a large quantity of water, so as to insure thorough precipitation of the bismuth. The precipitate is filtered off, and washed with water until the washings have lost all acidity. The precipitate is dissolved in a solution of ammonia; and for this rather more than a fluid ounce of solution of ammonia will be required for each ounce of bismuth used. Hyposulphite of soda—three-fourths of the weight of the bismuth employed—is then added, and when the salt is dissolved, the mixture is filtered, and preserved in well-closed bottles. The dye should contain about one-twentieth of its weight of bismuth. Such a mixture is said to form an admirable dye, which loses ammonia on exposure to air, and deposits sulphide of bismuth.—*British Medical Journal.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Treatment of Fractures of the Skull.

Dr. J. T. STEWART thus writes in the *Peoria Med. Mo.*: The importance of this subject cannot be readily overestimated. No other fractures bear any comparison unless it may be those of the spine. The far-reaching consequences, the dreadful effects of which are liable to result, even after years of comparative health, throw a fearful responsibility on the surgeon. If it were only a matter of life and death, it would not be so bad. An error of judgment leading to an error in practice, may, and is, very apt to entail a life of misery—epilepsy, insanity, idiocy, any of which is more to be dreaded than death.

The treatment of these fractures was pretty well established by the older surgeons, and there was a fair degree of unanimity in the profession; but of late a portion of our surgeons have drifted away from the sound teachings of the fathers in surgery. These teachings were established, were the results of much observation and long experience of the finest surgeons the world ever produced.

The improvements in this case are like many of our modern improvements, in the wrong direction.

These fractures may be any form or size. They may be simple, compound, or comminuted. In any of them, in case there is no depression of bone, immediate operative measures are uncalled for and wrong; but if symptoms of compression of the brain come on and are at all persistent, then trephining becomes necessary, for that is pretty sure evidence of depression of the inner table, or at least of effusion of the dura mater,

which would be relieved by the operation.

In all cases where there is any considerable depression, whether it be a simple or compound fracture, whether there are any symptoms of compression of the brain or not, the only true practice is to elevate the depressed bone. It was to call attention to this most important thing, and obtain the views of the members, that I brought this subject to your notice to-night. There are many points of interest which we might discuss with profit for hours, but this is the great overshadowing practical question. When we are called to attend a fractured skull, shall we trephine or not? It is interesting and important to study the various kinds of fractures, the relative danger in the different regions, etc.; but compared with the vital question in a certain case, shall we elevate the depressed bone or trust the case to nature, as some advise? they are of little importance. I admit I was led to believe the conservative plan was best in almost all cases, and practiced it; but, gentlemen, I have seen enough of the results of this practice to convince me it was a fatal error. I have yet to see the first man who had any considerable depression which was not corrected at the time, who, ten years after, did not suffer serious trouble from it; and some of them have become such wrecks it would have been a mercy to them and their friends if they had died when first injured. I know the line of duty is not always clear. There are cases which will perplex the wisest and most experienced surgeons. I would rather err on the side of trephining when it is not necessary than to fail to trephine in any case in which time afterwards revealed the fact that it ought to have been done. You may say, in these cases, trephine then. After

a few months or years have passed the bones become solid, and it is rare then that the operation will do any good. If there should be a spicula of bone growing down into the brain, and you can strike it and remove it, the operation would be a success; but they are the exceptional cases where this can be done.

The operation itself, if properly done, is not a very dangerous one, and then again there are many cases where Hay's saw can be used so as to make an opening large enough to admit an elevator.

The dangers of this operation have been exaggerated, and the value of it has been underrated.

Fractures.

Dr. JOHN B. ROBERTS, in *The Polyclinic* (Sept., 1884), says: "In the June number of *The Polyclinic* I expressed myself in favor of a more frequent adoption of trephining in cranial fractures. In the present paper I shall give a tabulated statement of what is, in my judgment, the proper treatment for each variety of such fractures. I admit that the line of treatment advocated is more heroic than that generally taught, but it has been accepted only after careful consideration of the reasoning of those who hold the opposite opinion to my own. Every case must be individually studied, and the patient's chances of death, of life with subsequent epilepsy or insanity, or of return to perfect health, carefully weighed; but for a working rule to guide the student and practitioner, I think experience will show that the indications given in the table are correct. Trephining, properly performed, is in itself so free of danger that in a doubtful case the patient had better be trephined than allowed to run the risk of death, epilepsy or insanity.

Syllabus of the Treatment of Fractures of the Cranium—Simple Fissured Fractures.—1. No evident depression, no brain symptoms. No operation. 2. No evident depression, with brain symptoms. Incise scalp and possibly trephine. 3. With evident depression, no brain symptoms. Incise scalp and possibly trephine. 4. With evident depression, with brain symptoms. Incise scalp and trephine.

Simple Comminuted Fractures. 5. No evident depression, no brain symptoms. Incise scalp and probably trephine. 6. No evident depression, with brain symptoms. Incise scalp and trephine. 7. With evident depression, no brain symptoms. Incise scalp and trephine. 8. With evident depression, with brain symptoms. Incise scalp and trephine.

Compound Fissured Fractures. 9. No evident depression, no brain symptoms. No operation, but treat wound. 10. No evident depression, with brain symptoms. Trephine. 11. With evident depression, no brain symptoms. Possibly trephine. 12. With evident depression, with brain symptoms. Trephine.

Compound Comminuted Fractures. 13. No evident depression, no brain symptoms. Probably trephine. 14. No evident depression, with brain symptoms. Trephine. 15. With evident depression, no brain symptoms. Trephine. 16. With evident depression, with no brain symptoms. Trephine.

Punctured and Gunshot Fractures. 17. In all cases and under all circumstances. Trephine.

In classes 3 and 11 I should be inclined to trephine if the depression was marked, or the fissures sufficiently multiple to approach the character of a comminuted fracture.

In classes 5 and 15 I should trephine,

unless the comminution was found to be inconsiderable.

The operation, when decided upon, should be performed at once, or certainly not delayed more than a few hours.

All cases, whether trephine, or not, should be treated as cases of incipient inflammation of the brain."

The Cause of Congenital Club-Foot.

Messrs. R. W. PARKER and S. G. SHATTOCK advocate a mechanical mode of causation for this deformity, i. e., intra-uterine pressure. This opinion rests upon a dissection of five cases (2 varus, 3 calcaneus), and study of specimens in various hospitals. They found no confirmation of the idea that it was due to a lesion of the nerve centres, or trunks, or bone deformity. A case was found where patches of skin were atrophied with bursæ beneath, over the exterior malleolus and head of the astragalus, comparable with what is found in those who have walked on an unreduced talipedic foot. Both were thought to be varieties of normal positions at some time of fetal life.—*Brit. Med. Jour.—Arch. of Pediatrics.*

Spinal Diseases as a Basis of Litigation.

Dr. E. C. SPITZKA (*Amer. Jour. Neur. and Psych.*) read a paper on the above subject before the society, with the following conclusions:

1. Spinal injuries, entailing, as they do, unparalleled suffering and disability, are preëminently proper grounds for compensation at the hands of those who, through negligence, are responsible for their occurrence.

3. Inasmuch as the previous existence of a neurotic state, such as hysteria and hypochondriasis, may be responsible for

many disease phenomena ensuing after railway and other shocks, allowance must be made in favor of the defendant to such an extent as it can be reasonably inferred that he is not responsible for the plaintiff's disorder. The same presumption and allowance should be made in case the plaintiff is shown to have suffered from syphilis or any other affections, such as certain pelvic disorders in females, which predispose to the development of spinal disease.

3. It is an interesting question whether the burden of proof as to the existence or non-existence of previous disease, which may mitigate damages, should lie with the plaintiff or with the defendant.

4. The presumption in the case of a litigant asserting the existence of disease of the spinal cord, is that he is really a sufferer. The question of simulation should always be raised where the direct proof of an alleged disorder is not satisfactory; but the burden of such proof should rest with the defendants, and every litigant in such cases should be considered a sick man till he is proven to be a sham.

5. Every attendant circumstance of an accident, or of violence leading to alleged spinal injury, should be made a part of the trial record. I find it difficult to understand, from a medical point of view, what the philosophy of the ruling of an eminent judge in the Harrold case was, when he ruled out, as inadmissible, evidence relating to the rapidity of the train before the collision.

6. The sooner corporations show an inclination to admit the claims of honest claimants for compensation, and to contest complaints on their merits, in short to limit themselves to methods which do not smack of chicanery, the sooner will the public, the press, courts

and juries be able to recognize, and willing to condemn, improper claims, and to brand and to prosecute those who endeavor to coin capital out of the misfortunes of others by the fraudulent pretense of spinal disease.

The Treatment of Sprain by the Elastic Bandage.

This method of treating sprains has recently been recommended by Marc See. It is the only method which fulfils the two indications:

1. To cause as rapid absorption as possible of the blood extravasated around the joint (a lesion which controls all the other symptoms, such as pain, swelling, difficulty of moving, etc.); and,
2. To favor cicatrization of the torn ligaments and ruptured parts by complete immobilization.

The antiphlogistics and bloodletting, formerly advised by Hunter and Guersant, only partially fulfil the former indication. There is the same objection to the movements which Ribe and Bonnet advise for the injured joint. The refrigerants and cold-water baths advised by Baudens cause contraction of the tissues around the joint, and dispel the inflammation, but they are not favorable to the absorption of the infiltrated fluids. Even massage, though superior to the other remedies just mentioned, fulfils only the second indication; furthermore, it is inconvenient, and requires much patience and time; and between the séances of manipulation the swelling reappears and the pain returns. It is true that massage has the advantage of removing the extravasated materials from the region of the joint toward the more vascular portions of the limb, where they are more easily absorbed. But the elastic bandage has this advantage in a greater degree, since its

action is continuous. Finally, and above all, it favors immobilization of the joint, which is impossible during massage, and without which it is almost impossible to get cicatrization of the torn structures and complete recovery in sprains of any intensity. The bandage should be applied to the skin itself, care being taken to fill up the flat and depressed places with wadding, so as to give a uniform surface around the joint for the bandage to act upon.—*Revue de Therap.*

Liniment for Weak Back.

P. M. DROMGOLD, M. D., uses the following: \mathcal{R} . Tr. cantharides—Tr. camphor, aa $\frac{3}{4}$ iv.; oil of cedar, $\frac{3}{4}$ j.; turpentine—auquæ ammonia aa $\frac{3}{4}$ iv., Mix as above given.—*Med. World.*

Dental Surgery.—The Use of the Gum Lancet.

J. MORGAN HOWE, M. D. (*The Independent Practitioner*), has an article under the above head, and in closing says:

"There are instances, however, in which all such (hygienic) means are insufficient, affording at best but partial and transitory relief; the child gives frequent evidences of oral suffering, or of nervous irritation by reflex disturbances; in some such cases the gum lancet affords the means of rendering the most prompt and efficient relief. Its use is clearly counter-indicated in such early stages of teething as when the advancing teeth are probably obstructed by alveolar tissue, but when the enlarged gum indicates both to sight and feeling the presence of the tooth beneath it, when the former tissue has a tense appearance (whether it is sore, swollen and red, or not), with the disturbances before referred to, which more general

treatment has failed to relieve, a free incision through the gum to the tooth, with a sharp lancet, will in most instances be promptly followed by very marked amelioration of all symptoms of irritation. We have repeatedly performed this trifling operation with such salutary results, in very few instances without them. The ineffectual use of the lancet may prove a mistaken diagnosis, or that the irritation proceeded from teeth less advanced in development than those released by the incision; it does not prove that dentition is incapable of producing irritation which may, through reflex action, endanger life. The instances, however, in which gum lancing is not followed by relief, when it has been indicated by the conditions and symptoms, are so rare that it may be regarded as one of the most certain and effectual of minor operations, and so far as we know is contra-indicated only by a hæmorrhagic diathesis.

"The objection, urged sometimes, that the gum will be made much harder (if it should heal) by the formation of a cicatrix, and the temporary relief hoped for be followed by an aggravation of the difficulty of absorption of the gum, is invalid, from the fact that a cicatrix is not found after gum lancing, and if there should be a formation of cicatricial tissue it would absorb more readily than the primary tissue.

"The valid objection to the lancing of the gums of teething children is the 'almost indiscriminate' practice of it, which Dr. Barrett believes is 'falling into desuetude.' There are probably few who will not be glad with him, and hope that all other practices that approach the indiscriminate may find the same limbo; but judicious gum lancing, practiced with discrimination and judgment, not for the purpose of

depleting a congested gum but to release an imprisoned or obstructed tooth, is both reasonable and commendable, and its value should not be overlooked.

"Cases of obstructed eruption of wisdom teeth often demand local treatment.

"Those whose position in the angle between the body and ramus of the jaw causes them to be covered with a mass of soft tissue, which is not absorbed sufficiently to prevent it becoming inflamed by the pressure of the growing tooth and of antagonizing teeth in the superior jaw, may be made less troublesome by proper lancing, but permanent relief is only obtained, in many instances, by the removal of the tooth for which nature has failed to provide a place.

"Extraction must also frequently be resorted to when neuralgic or other disturbances arise through the obstruction of the wisdom tooth by the second molar, or by the latter, together with the maxillary ramus, or when the former is tipped forward so that its progress is arrested by the second molar. When the third molar occupies so nearly a horizontal position that the crown is in contact with the neck of the second molar, the extraction of the former is often an impossibility, without resorting to an entirely inexpedient operation, and in such case the removal of the second molar, the obstructing tissue, must be chosen as the least evil.

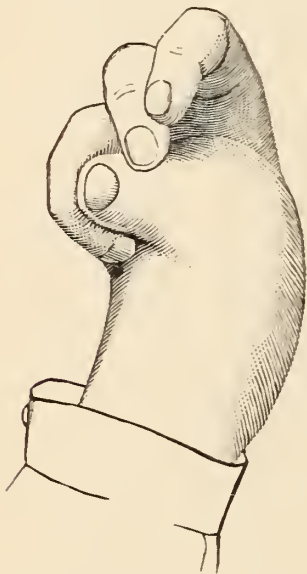
"But wisdom teeth placed anomalously in the maxillæ not unfrequently attain to complete development before meeting in their advance such resistance as to cause pulp irritation with local and reflex disturbance, and as interference is not demanded, it would unquestionably seem to be a blunder."—*Det. Lancet.*

Two Cases of Surgery.

Dr. AP MORGAN VANCE.—*Louisville Med. News.*

CASE I. Extreme deformity of hand in child of four years, caused by a burn; the result after operation, skin-grafting, and continued mechanical treatment.

June 15, 1883, Mr. A. M. Stivers, brought his son, aged four years, to me for advice concerning the child's hands, giving this history of the case: Two years before, while at play, the child had fallen into the residue of a



brush fire, burning both hands very badly, the right much the worse. A physician was called, and dressings were applied, but unfortunately the hands were not put upon splints, being only bandaged round and round, thus increasing the tendency to deformity. In a few months the right hand assumed the position illustrated by the accompanying figure.

The father was anxious to know if anything could be done to relieve the deformity and restore the usefulness of the member. After careful examination,

I told him that I would like much to try what could be accomplished, but could promise nothing.

The prognosis was not very encouraging, but he put the case in my hands, and June 22d the first step in the way of treatment was taken, Dr. John Hays administering the anesthetic. This was to completely dissect away all scar-tissue, and break back the thumb and fingers to their natural position. After this, a leaflet of skin was dissected up from the back of hand, reflected between thumb and fore-finger on the adductor region of thumb, and stitched into position. Till the eighth day this seemed to be doing well, and I hoped that a large area of the denuded surface would be immediately covered by good skin, but signs of slough appeared at the edges, continuing throughout.

The only good obtained by this procedure was the shortening of the skin on the back of hand, which had been made too abundant by the malposition of thumb, and thus aiding in holding the thumb in the new position. The hand was, from the first, firmly fixed to a hard rubber splint. By the tenth day the granulations over the large surface were on a level with the border, when a number of skin-grafts were planted, taken from my own, the father's, and the arm of Dr. Cartledge, who had assisted me in the case.

In getting these minute pieces of skin, a small pair of eye-forceps and ordinary curve scissors were used. A hair being grasped, traction was made, elevating the skin into a pyramid, with the hair for a handle, was planted on the ulcer; the hair acting as a guide to show that the fresh surface was down.

Each alternate day for a week these grafts were planted, till fifty-eight were growing, and spreading with wonderful

rapidity, the islands coalescing with each other and the shore line, till in two weeks from the outset the whole surface was covered by new skin.

After several months a tendency to contraction and formation of bands or corns from the thumb across the palm to the little finger appeared. The main one of these was divided by a V-shaped incision, the wound being allowed to granulate, thus giving increased length. The mechanical treatment has been faithfully kept up till now. For five months the splint had been removed for half of each day, the child using the hand with remarkable dexterity and strength. The following cut represents the hand now, as it lies at rest. By



voluntary effort the position can be much improved.

All surgeons know the great difficulty of successfully treating the deformities resulting from burns. I have learned from experience with a number of cases

that the most important element in the treatment is the patience and perfect fidelity with which the mechanical treatment is carried out, the grafting of new skin aiding very materially in the result.

CASE II. A large central osteosarcoma of lower jaw in a young man of twenty-three. Removal by complete excision of one half of that bone. Recovery, with good use of other half; greatly improved health; no recurrence after eight months.

Sebastian Erringer, aged twenty-three, came to me in September, 1883, with this history: About three years before, he had a tooth extracted, after suffering much with it. Soon after, he noticed a small lump on the jawbone about the former site of the tooth, which gradually increased till it attained the size of a duck's egg.

In addition to the central tumor, a mass of infiltrated mucous structure entirely filled the buccal cavity, the whole making his life very miserable, and rendering him an object of horror to all who met him. He had suffered comparatively little pain, but was very desperate, having failed to get any one of the many surgeons he had consulted to attempt the removal of the cancer.

So soon as he was sufficiently under the influence of the ether, a stout ligature was passed through the tongue, which was drawn out at angle of mouth on the sound side, the patient being placed on that side. This was to prevent the tongue from dropping back, causing suffocation, and that it might act as a gutter for the escape of blood as the operation progressed. Incision was made by one sweep of the knife from the articulation along lower border of jaw to the opposite angle of mouth, through the skin, and rapidly continued down to bone, all blood-

vessels being instantly closed by clamp-forceps. The bone was disengaged by close dissection from the symphyses to neck, when it was divided by a Hey's saw just on the good side of symphyses, then it was forcibly adducted prior to disarticulation. In doing this a complete fracture was made, and all but the neck and head of bone came away. The anesthetic was no longer pushed, lest trouble might arise from blood entering larynx if too great anesthesia was kept up. This was prevented by occasional coughing of patient, and by introduction of operator's hand to remove accumulating clots. The frag-



ment remaining was grasped in lion-jawed forceps and dissected out.

The clamp forceps were then removed, but one ligature being needed. This was applied to facial artery. The wound

was closed by figure eight sutures, with superficial stitches between them. There was considerable shock, but reaction occurred very soon after the patient was put to bed. No antiseptic precautions were used other than taking sponges and instruments from a ten-percent. solution of listerine, the wound being dressed in blood. It healed completely by first intention, and afterward the secretion of synovia in joint cavity was so great that a small opening was produced at the upper angle of the wound, which healed in the course of two weeks.

The eighth day he was able to appear before the Medico-Chirurgical Society of Louisville, to whom the case was orally reported. At the end of eight months, when he was photographed, he was in splendid condition, doing work as a quarryman. He has been able to chew his food since a few weeks after operation. The recurrence of these growths is the important question to be discussed. The question of their removal is to my mind always a plain one.

This man was worse than dead. If we had risked his life, one out of two chances the operation would have been justifiable. From all appearances, I believe that there will be no recurrence in his case.

New Instruments—Allis's Improved Ether-Inhaler.

We present below a cut of the apparatus of Dr. ALLIS, one of the surgeons of the Presbyterian Hospital, of Philadelphia, for the administration of ether. This instrument has been in use in the United States and Europe for several years, and may be said to have won a place among the standard instruments.

Fig. I. shows the instrument complete,

and is two-thirds the full size. The inhaler consists of a metallic frame, sufficiently large to cover the lower part of the face. The bars are nearly a quarter of an inch broad, leaving a quarter of an inch between each and its fellow. The spaces are made by a punch, which removes a section from a solid sheet of

bandage may be seen rolled up. When the bandage has been passed between all the bars, and the hood or cover put on (Figs. I. and III.), one can look through the instrument from end to end, as there is a space of nearly a quarter of an inch between the several sections of the bandage.



FIG. I.

metal. It will thus be seen that there can be no danger of the bars giving way, as they would were they soldered upon a band.

Fig. II. shows this frame with a bandage partly laced between the bars. It has been passed from side to side, dividing the instrument into parallel sections. On the right a part of the

The advantages of this mode of construction are :

1. It gives the patient the freest access of air. It is a mistake to think that air must be excluded. All that is necessary is that *the air should be saturated with the vapor of ether.*

2. It affords a series of thin surfaces upon which the ether can be poured,

and from which it will almost instantly evaporate. In this respect it differs from the sponge, which retains the ether in a fluid state much longer. Should the bandage become soiled a new one can be inserted in a few minutes.

3. By leaving the instrument open at the top the supply can be kept up constantly, if desired; and as *ether vapor is heavier than air*, there is no loss by not covering it. The top should never be covered.

Mode of Using the Inhaler.—1. Place a towel beneath the chin of the patient,

3. Begin with, literally, a few drops of ether; this will not irritate the larynx. Add, in a few seconds, a few drops more, and as soon as the patient is tolerant of the vapor increase it gradually to its fullest effect.

4. When the patient is fully influenced it is well to add a few drops at short intervals, and thus keep up a gradual anesthetic effect.

Advantages of the Inhaler.—1. It presents a large surface for the liberation of ether vapor. The partitions are made of thin bandage, and the air com-

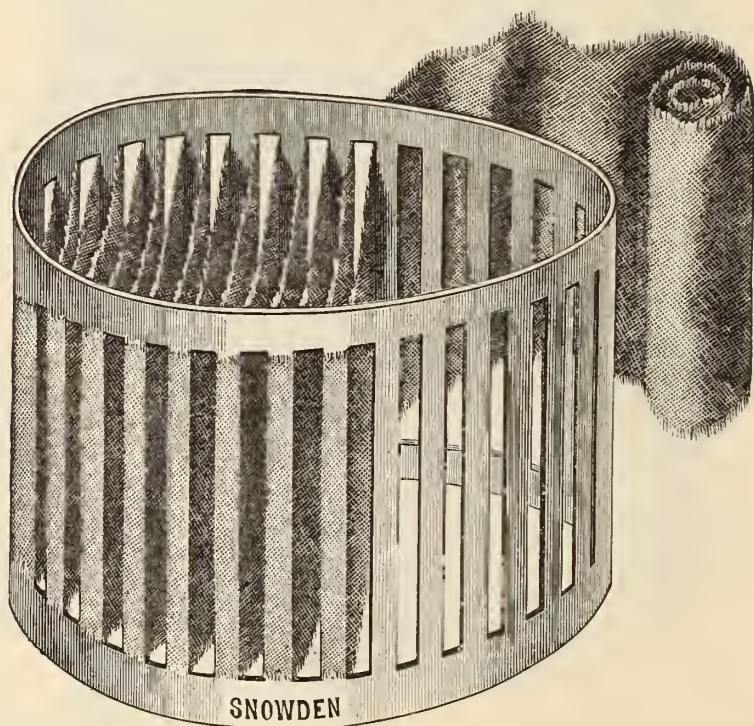


FIG. II.

as experience has taught that a towel should always be within reach in administering anesthetics.

2. Place the instrument over the face, covering the nose and chin, and let the patient breathe through it before any ether is applied. This will convince him that he is not to be deprived of air.

ing to both sides of each layer, sets the ether vapor free more rapidly than is possible in the use of a towel or sponge.

2. It is open at the top, and the ether can be added *constantly*, if desired, and in small quantities, without removing from the face. The sponge and towel both require removal, and the ether

is usually poured on them in quantities.

3. The ether falls by its weight, as it is heavier than the air; and as the in-

5. By its proper use the laryngeal irritation may be wholly avoided, the anesthetic effect as easily gained as is possible with the use of ether, a great



FIG. III.

strument fits the face the patient gets the full advantage of it.

4. It does not cover the patient's eye—does not terrify him, and he often passes under its influence without a struggle.

economy of ether, and great comfort to the patient. The instrument is manufactured by William Snowden, No. 7 South Eleventh street, Philadelphia.—*Philadelphia Medical Journal*.

VENEREAL DISEASES.

The Hypoglossal Nerve in Connection with Syphilitic Glossoplegia.

The *London Med. Record* tells us that in the *Berlin Charité Reports*, Band viii., 1883, Lewin treats of the above. Amongst 50,000 cases of syphilis he found nineteen with gummatous glossitis, and three in his private practice, all these twenty-two being affected with paralysis. The histories of two patients are given in full; one suffered from hy-

poglossal paralysis on one side, with symptoms almost like those of bulbar paralysis, and was cured by sublimate injections. The other presented atrophy of half the tongue, with nodes at its root; deviation of the point to the diseased side (so that it scarcely projected beyond the teeth); failure in raising it to the hard palate; difficulty in masticating, in swallowing, in speaking quickly and for long, and in phonating the letters d, t, l, n, r. There were also lowered and delayed taste-perception on the left side of tongue; with lowered per-

ception of movement, position, temperature, pain, and electric irritability; salivation, and lastly, a great paleness of that side. Post mortem, two gummatous foci were found in the skull; one between the dura mater and the bone to the left of the vertex, the other upon the hypoglossal nerve itself. This nerve, anterior to the condyloid foramen, and partly within it, was embedded in a greyish-white jelly-like gummatous mass. The root-paths of the nerve in the medulla oblongata were unaffected; the trunk alone was involved. A complex of veins existed about the nerve as it entered its canal, like a small cavernous tumor; this evidently arose from the venous circle normally found around the nerve there. The nucleus of origin was normal.

Lewin comments upon this case:

1. The motor paresis of the tongue was due to the paralysis of its muscles (the genio and styloglossus, the longitudinal—superior and inferior—and transverse strata, and the genio-hyoid).

2. The want of taste is ascribed to pressure by gummata upon the peripheral ends of the glosso-pharyngeal in the circumvallate papillæ. Lewin is thus of opinion that the chorda tympani holds its gustatory fibres only from the glosso-pharyngeus (by the following route: petrosal ganglion, tympanic plexus, small superficial petrosal, otic ganglion).

3. The salivation is explained as a reflex act, most probably through the glosso-pharyngeal nerve.

4. The local anæmia was the result of compression of the lingual nerve, which, according to Vulpian, holds vasodilator nerves for the tongue.

5. The stuttering or stammering might be caused either by lessened size of the tongue, or by compression of the fibres of origin of the hypoglossal nerve by the vertebral artery (Willis, "freno injecto

circumligans"), or lastly, from pressure of the swollen circulus venosus upon the nerve at the condyloid foramen.

In the historical sketch the various views of the functions of the hypoglossal nerve, from Galen down, are given. Longet says it is only sensitive over the great cornu of the hyoid. Of late years, anatomical search has been made for any nerves which might afford sensory fibres to the hypoglossal. These are detailed thus in the anatomical section. Some authors have thought that the sensory fibres are derived from a small posterior root provided with a ganglion, like a posterior spinal nerve. Lewin remarks that such a root does not occur in man, and also contends against the view that the superior cervical ganglion sends sensory fibres to the hypoglossus. The anatomical relations of the hypoglossus with the cervical nerves, the vagus, and the lingual nerve are fully detailed.

No satisfactory conclusions from anatomy being at hand, Dr. Lewin, with Dr. Holtzer, made experiments upon dogs with the following results:

1. The peripheral end of the hypoglossal nerve contains sensory fibres. 2. In most cases these are not derived from the lingual; but (83) arise from fibres accompanying the nerve-trunk. 4. Between the descending branch (descendens noni) and the anastomosis with the lingual, there pass sensory fibres, some from the lingual, others from the hypoglossal. 5. Lingual nerve fibres descend also in the descendens noni. 6. No sensory fibres pass from the cerebral end of the hypoglossal to the descending branch. 7. Sensory fibres arise in the last-mentioned, apparently from the cervical nerves. 8. Fibres from the lingual nerve (on the distal side of the descendens) run backwards along the hypoglossal to its exit from the condy-

loid foramen. 9. The hypoglossal itself has no sensibility from its root down. 10. Sensory nerves travel with the hypoglossal (independently of the above-mentioned fibres from nerves elsewhere, by anastomosis) immediately after its exit from the skull; either from the vagus or from the cervical region of the spinal cord.—*Med. & Surg. Reporter.*

Some Facts in Connection with Gonorrhœa

Gonorrhœa is a subject of perennial interest, and although the disease has long been upon the nosological list, and been subjected to the greatest variety of treatments, there seems as yet to be no consensus of opinion in the profession regarding the most effective means of restoring the infected urethral tract to its normal condition. This unsatisfactory status of therapeutic views is, doubtless, very largely owing to the difference in opinion which prevails touching the more exact etiology of the affection and the pathological changes which characterize the fully-developed disease. In view of this status any observations calculated to throw light upon obscure or disputed points, will be of interest, and for this reason a paper read before the Philadelphia County Medical Society, by Dr. J. William White, on the subject of gonorrhœa, is more than ordinarily valuable. Dr. White refers to the two opinions which exist touching the nature of gonorrhœa. According to one of these, the disease is the result of a specific poison, while the other holds that it may arise also from the contact of any form of pus. As antagonizing the view which regards it as a specific inflammation of the urethra, we have the facts that it has no fixed period of incubation, the disease being liable to supervene at any time from a few hours to many days after exposure. One at-

tack, moreover, does not protect against a second attack, as in the case of diseases of whose specificity there is no question. Specific diseases also run a definite and self-limited course, and as a rule have some characteristic lesions, in which respects gonorrhœa again differs. The argument most powerful against the view that the disease may result from contact with purulent discharge, is in the fact that husbands may for an indefinite period have illicit indulgence without infection, with wives who are afflicted with purulent leucorrhœal discharges. Ricord attributed this immunity to a sort of acclimation, but this explanation will not meet the case of newly-married men, whose wives are troubled with purulent leucorrhœa. Probably pus is not poisonous in itself, but as it exists in the discharges of leucorrhœa, may take on virulent character through excesses and irregularities, or through other disturbing causes on the part of the woman. The pus as it is secreted in the case of the virtuous married woman, is probably not contagious, but under the erethism and other disturbances of kept women or unfaithful wives, it is apt to assume virulent properties. In the case of prostitutes, the frequent use of the syringe, and other measures for insuring cleanliness, are matters of business, and we have thus accounted for the well-known fact that these women are less apt to communicate gonorrhœa than are those who strive to maintain before the public the semblance of virtue.

Dr. White distinguished three forms of gonorrhœa: The acute inflammatory form, the subacute or catarrhal form, and the irritative or abortive variety. In the first form ardor urinæ and chordee are prominent symptoms. Ardor urinæ has been attributed to stretching of the urethra, and also to the irritative

effects of the ingredients of the urine. The latter is the most probable cause, as seen in the fact that alkaline diuretics, which increase the quantity of urine, diminish also its acidity, and by the latter action diminish the pain. Various theories have been proposed to account for chordee. That which is now the most generally accepted theory is that the trabeculæ of the spongy portion are obstructed with lymph, and in this way their equal distention with venous blood is prevented. Other complications of the acute inflammatory form of gonorrhœa are balanitis, prostatitis, and epididymitis. The duration of this form is not commonly less than three weeks, the stages being two—the acute stage, occupying a week, and the subsidiary, about two weeks. A very common error committed by young practitioners, is to give a too favorable prognosis in these cases, promising a cure in a few days.

Gleet and urethral stricture are most apt to follow the subacute or catarrhal form, the symptoms of which are less violent than those of the acute variety. The chief complication of this form is gonorrhœal rheumatism. Various theories have obtained touching the nature of this complication. By some it has been held to be metastatic, the inflammation leaving the urethra to attack the synovial membrane. Other theories have been propounded, but without enumerating them let it suffice to state that the now prevalent view is that which holds the affection to be a septicæmia. This explains why it occurs in the long cases, and in consequence of the greater length and more absorptive character of the male urethra compared to the vagina, the greater frequency in males is accounted for. The clinical difference between gonorrhœal and ordinary rheumatism are also in favor of the septicæmia view.

It is because of the existence of the irritative or abortive variety of gonorrhœa that various plans of abortive treatment have achieved their reputations. Out of every thirty cases of the disease, perhaps four or five will never progress beyond the premonitory symptoms, when even only the expectant plan of treatment is pursued.

The above clinical facts contain suggestions which will be utilized by the practical observing physician.

In this connection we take the opportunity of producing a prescription by Dr. J. Mortimer Granville, for a variety of urethral troubles known by the several terms ending in “-rhœa.” These affections are common underlying causes of “mind worry and nervousness.” When other remedies have failed in these cases, Dr. Granville has found an injection of a freshly-prepared infusion of saxifrage leaves to answer an excellent purpose. He prepares the infusion by adding one part of the leaves to ten of water, the temperature of which is 98 degrees Fahrenheit. To three ounces of this he adds one of glycerine, and uses the injection twice a day—*Me Age*.

DISEASES OF THE SKIN.

The Retention of Hair in the Axilla.

Evolutionists will be interested in reading the following remarks which Dr. A. WYNDHAM MARTIN publishes in the *Edinburgh Medical Journal* for June, 1884:

The different views held on this subject render the question one of great interest to the student of science. The only reference to the subject made by Darwin, in the “Descent of Man,” is the following:

"That the hair is chiefly retained in the male sex on the chest and face, and in both sexes at the junction of all four limbs with the trunk favors this inference—on the assumption that the hair was lost before man became erect, for the parts which now retain most hair would then have been most protected from the heat of the sun."

Amongst many other theories are the following: 1. That the hair in the armpit is intended to reduce the friction caused by the movements of the arm. 2. That at the age when the hair makes its appearance there is a greater supply of blood to the part. 3. That the increased heat serves to develop the hair follicles and sebaceous glands in greater abundance.

With regard to No. 1, any person on a slight examination of his own armpit will find that there is no friction at the part where the hair is most developed. As to 2, if due to an increased supply of blood to the axilla, it should also appear on the mammary region in the female, as there we see a much greater change in the blood-supply at the age of puberty. With regard to 3, the development of hair on the face in the male at the same age is not generally attributed to an increase of heat and consequent development of hair follicles and sebaceous glands. If it be so in the axilla, why should the female lack hair on the face, considering that both sexes share in the possession of it more or less in the axilla? If we examine the subject morphologically instead of physiologically, we see that the axilla, the inner part of the fore limb, corresponds to the groin, the inner part of the hind limb. Now the presence of hair in the pubic region is sufficient, by the law of "correlation of growth," to account for the presence of hair in the corresponding part of the

fore limb, the axilla. On examination it will be found to bear a fixed ratio to that of the pubes, and also to correspond closely in color. Sexual selection in primitive man before he clothed himself is sufficient to account for the hair on the pubes. The sexual passion in both sexes will be found to be in proportion to the development of the pubic hair, and the "law of inheritance" will explain its persistence.

DISEASES OF THE EYE AND EAR.

Therapeutic Notes.

Formulæ used in ophthalmic practice at the German Eye and Ear Infirmary of Philadelphia, by M. LANDESBURG, M. D.:

Catarrhal conjunctivitis, in which inflammatory symptoms are slight, with but little secretion: *R.* *Acidi tannici*, gr. ij.; *aquæ opii*, 3 iij. *M. S.* Two drops into each eye morning and evening.

Same with more pronounced symptoms of inflammation: *R.* *Zinci sulphatis*, gr. j.; *tinct. opii crocat.*, gtt. vj.; *aquæ destillat.*, 3 iij. *M. S.* Apply as the above.

Against the neuralgic pains and photophobia: *R.* *Hydrarg. præcipit. albi*, gr. x.; *extract. belladonnæ*, gr. v.; *unguenti emollient*, 3 iij. *M. S.* Use a small quantity as large as a pea and rub into temple and forehead thrice daily.

In cases with highly pronounced swelling of the mucous membranes: *R.* *Plumbi acetatis*, gr. j.; *aquæ destillatæ*, 3 iij. *M. S.* A few drops between eyelids thrice daily. Or: *R.* *Plumbi acetatis*, gr. j.; *petrolati*, 3 ij. *M. S.* To be brushed between the eyelids thrice daily. Also: *R.* *Lapi-*

dis divini, gr. ij.; aquæ destillat., ʒ iij.; liquor. plumbi subacetat, gtt. iij. M. S. Three drops between the eyelids twice or three times daily.

Purulent conjunctivitis: *℞*. Hydrarg. bichloridi corros., gr. 1-6: aquæ destillat., ʒ iv.; mucil. semin. cydonii, ʒ ij.; tinct. opii crocat, gtt. vj. M. S. Apply for ten minutes to the closed eyelids four times a day. Or: *℞*. Argenti nitratis, gr. v.; aquæ destillat., ʒ v. M. S. As the above.

Phlyctenular conjunctivitis, in cases with marked inflammation: *℞*. Extracti opii, extracti belladonnæ, āā gr. v.; aquæ destillat., ʒ iij. M. S. Apply to the closed eyelids for ten to fifteen minutes three times daily.

After the inflammatory symptoms have subsided: *℞*. Hydrargyri chloridi mit., ʒ ij. S. To dust into the eye from a camel's-hair brush. Or: *℞*. Sodii biboratis, gr. ij.; aquæ destillat., ʒ iij. M. S. Three drops into each eye twice or three times daily. Or: *℞*. Aluminis pulv., gr. ij.; aquæ destillat., ʒ iij. M. S. As the above. Or: *℞*. Tinct. opii crocat., f ʒ j.; aquæ destillat., ʒ iij. M. S. As the former.

Affections of the cornea—Phlyctenular keratitis in cases with marked symptoms of inflammation: *℞*. Ext. opii, ext. belladonna, aa gr. v.; aquæ destillat., ʒ iij. M. S. Apply to the closed eyelids for ten to fifteen minutes three times daily.

After subsidence of the inflammation: *℞*. Hydrarg. chloridi mit., ʒ ij. S. Dust into the eyes with a camel's-hair brush once daily.

Ulcers of the cornea: *℞*. Atropinæ sulphatis, gr. j.; aquæ destillat., ʒ iij. M. S. One drop into the eye every two hours. Or: *℞*. Eserinæ, gr. j.; aquæ destillat., ʒ iij. M. S. One drop into the eye four times daily.

Opacities of the cornea: *℞*. Olei

morruæ, ʒ ij. S. Rub into the eye twice daily. Or: *℞*. Iodoform oleici, ʒ j.; petrolati, ʒ ij. S. As the above.

To Remove Foreign Bodies from the Eyes.

Before resorting to any metallic instrument for this purpose, Dr. C. D. AGNEW (*American Practitioner*), would advise you to use an instrument made in the following manner: Take a splinter of soft wood, pine or cedar, and whittle it into the shape of a probe, making it about the length of an ordinary dressing probe. Then take a small, loose flock of cotton, and, laying it upon your forefinger, place the pointed end of the stick in the centre of it. Then turn the flock of cotton over the end of the stick, winding it round and round, so as to make it adhere firmly. If you will look at the end of such a probe with a two-inch lens you will see that it is quite rough, the fibres of cotton making a file-like extremity, in the midst of which are little interstices. As the material is soft, it will do no harm to the cornea when brushed over its surface.

When ready to remove the foreign body, have the patient rest his head against your chest, draw the upper lid up with the forefinger of your left hand, and press the lower lid down with the middle finger, and then delicately sweep the surface in which the foreign body is imbedded, with the end of the cotton probe. When the foreign body is lodged in the centre of the cornea, it is most important not to break up the external elastic lamina; for if you do, opacity may follow, and the slightest opacity in the centre of the cornea will cause a serious diminution in the sharpness of vision.—*Med. and Surg. Report.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Dupuytren's Contraction of the Fingers.

Dr. W. MUIR ANGNEY read the following report of a case that had occurred in the polyclinic service of Dr. C. K. Mills :

Dr. W. W. Keen, in one of the most valuable papers on "Dupuytren's Con-

jured his hands in any way. He has kept a trimming-store for twenty years, and before that time was in the grocery business. He was in California thirty-five years ago, being one of the "forty-niners." He slept in a tent, and mined for gold for twenty months, but apparently did not suffer, or at least not immediately, from the exposure. For fifteen years he has suffered with rheumatic or rheumatico-gouty pains.

Twelve years ago the little finger of the left hand began to curve inward ; contraction soon followed in the ring, and later in the middle finger. The little finger of the right hand also gradually contracted.

When he presented himself at the Polyclinic the joints of the hands and fingers were found to be enlarged. The little finger of the right was strongly flexed ; but the trouble was much more marked and extensive in the left hand, the little and ring fingers being drawn

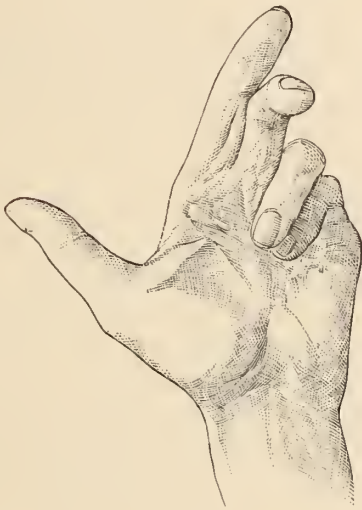


FIG. I.

traction" published in recent years, states that he was able to find, exclusive of his own cases, twenty-six in number, only ninety-five other recorded cases. It has been, therefore, thought worth while to put the following additional case briefly on record. The history points to a rheumatic or rheumatico-gouty origin of the affection.

H. B., aged seventy, married, born in Ireland, had one sister with a rheumatic history. His father died of pleurisy, and he did not know the cause of his mother's death, or any details of the health history of either parent. He denied syphilis positively, and never in-



FIG. II.

in so as to almost touch the palm of the hand, the second finger also being

much contracted. (See Fig. 1). Ridges were found running to these fingers across the palm. The general strength of both upper extremities was about the same. He had never had any special treatment for the contractions.

Subcutaneous incisions were made into the palmar fascia and its cord-like prolongations by Dr. John B. Roberts. In all, eight incisions were made at a single sitting. The hand was straightened, and kept in a digital splint for six weeks, manipulations also being used. The splint was then used only at nights, and galvanism was applied in the form of the continuous current through the hand, and the current interrupted to the interossei and other muscles. The hand is now capable of being straightened, as shown in Fig. 2, and he also has much improved use of it in flexion and extension.

Dr. Mills said that many surgeons referred all such cases to traumatism. The chief interest in them was the pathology and causation. He believed that most cases of true Dupuytren's contraction were due to rheumatism or rheumatic gout. Hysterical contraction sometimes resembled it, but continuous nerve pressure on the median nerve would relax this form, although it would subsequently return. Some of the cases called athetosis also resembled it. Here there were no ridges across the palm, and the contractions could be readily overcome temporarily.

Dr. John B. Roberts thought the case showed facts in opposition to the theory of traumatism as a cause, for the man was now under treatment for chronic arthritis of the fingers. It was a pity that the name Dupuytren's had been given to this form of contraction, for, if we call it contraction of the palmar fascia, we at once separated it from the contractions of tendons. A proof of its

rheumatic origin was the frequency of its occurrence in those who did no manual labor.

Dr. Angney said the history of the case showed no traumatism. The man had been a shop-keeper, and had the trouble ten or twelve years before consulting a physician. Rheumatism and gout were concerned in the ætiology.

Fractures of Arm the Result of Delivery.

Dr. JOHN J. REID, (*Med. & Surg. Reporter*): It is important to put on record a case of sloughing of the hand occurring in a child having fracture of the arm, the result of delivery, inasmuch as the evidence at first pointed directly to bandaging as being the cause. There was nothing of special interest noticed for several days after the injury. The arm was put up in a right-angled tin splint, and the usual means taken to keep it in place.

One morning it was found that the hand on the affected side was swollen, and immediately the splint and bandage was removed. On the following day evidences of sloughing appeared on the back of the hand.

At this stage the feelings of the attendant were by no means pleasant, as there was but little chance left to defend the treatment of the case. But on the following day swelling occurred on the hand of the unaffected side, and on which there could be no means for any external mechanical obstruction. Within a few days the child died. There was no post-mortem examination. There were no signs of swelling of the feet, or any other evidences of dropsy.

As was suggested at the beginning of the article, the record of cases of this class are very important as having a bearing on cases of malpractice.

It may be as well to say that all cases

of fracture of the forearm in infants are not as easy to treat as might be inferred from the reputed experience of some. The special difficulty is to obtain a splint that will prevent motion at the point of fracture. Often trying different methods, I found the only reliable way was to place a sufficient amount of cotton-wool between arm and chest to allow the arm to rest in a slightly abducted way, and then bind the arm to the chest with a bandage. No matter what splint I used, I found that the child drew the upper fragment inward and thus caused angularity, but by packing the space between the arm and chest with cotton-wool this was prevented.

Treatment of a Fractured Patella.

Sir JOSEPH LISTER has recently published in the *Lancet and British Medical Journal* some of his experience with the wiring together of fractured bones. Two of these were ununited fractures of the olecranon process and seven were fractures of the patella. In his earlier experience he thought it necessary to prepare for a later removal of the silver wire employed to keep the parts together, but now he simply gives the wire two half round twists—one complete turn—cut the ends and with a small hammer forces it down flat upon the bone. It appears from both Sir Joseph's article and one on the subject of Fractures of the Patella, etc., by McEwen, of Glasgow, that one great obstacle to the union of the fragments of the patella is the fact that the soft parts from the anterior aspect of the patella fold over the fractured extremities and adhere intimately to the fractured surfaces, so that before the fractured surfaces can be brought into a favorable position for union, the soft part that folds in has to be cut off.

The following is the *modus operandi* given in one case by Sir Joseph Lister: "The clots having been cleared away from between the fragments, and from the interior of the joint, I applied a common bradawl in the middle line of the patella, drilling each fragment obliquely so as to bring out the drill upon the broken surface a little distance from the cartilage. Pretty stout silver wire was then passed through the drilled openings and the fragments brought accurately into opposition. Before they were brought together, however, an arrangement was made for the drainage of the joint. This was done on the same principle in all the cases that I have to record, and I may therefore describe the matter once for all. A pair of dressing forceps with the blades closed were passed through the wound to the most dependent part of the joint at its outer aspect. The instrument was then forcibly thrust through the synovial membrane, the fibrous capsule, and the fascia, until the point of the forceps was felt under the skin. An incision was next made with a knife through the skin upon the end of the dressing forceps so as to allow it to protrude. The blades of the forceps were then expanded so as to enlarge the opening which they had made in the deeper structures without risk of causing hemorrhage. The drain was then seized in the forceps that protruded through the wound and drawn into the joint. The ends of the wire were now twisted together and the twisted ends brought out at the wound, which was closed with sutures and a small drain inserted. The limb, enveloped in an antiseptic dressing, was placed in a trough of Gooch's splint, with the upper end oblique, corresponding to the line from the tuberosity of the ischium to the great trochanter, and the lower end excavated

in the form of a horseshoe, while the horns of the horseshoe were well padded to support the sides of the foot."

From the results obtained as compared with previous cases it would seem as though, with all attention to details, such as modern surgery demands, that this mode of procedure will be the one employed. The rather indefinite expression used about "pretty stout silver wire" is elsewhere given with greater definiteness as follows:

The thickness of the wire must be proportioned to the force to which it is to be subjected. For the olecranon only one twenty-fifth of an inch is necessary, while for the shaft of the femur of an adult male, wire one-tenth of an inch thick is necessary to resist the powerful muscles of the thigh.

After showing the peculiarities of the various cases he had treated, he continues: "These are all cases which I have operated upon, and I consider it fortunate that I am able to bring you six out of the seven. I should like now to say a few words as to the method of operating. There is very little indeed to be added to what I have already said, except this: It is very desirable that the lower surface of the patella should be left quite smooth. We cannot be perfectly sure when we drill that the bradawl will come out exactly at a corresponding point on the two surfaces. Supposing that on one side the instrument should have come out too far down, it may be into the cartilage, we do not regard that at first, but pass the wire through the two drill holes, and then on that side on which the hole has come too far down, by means of the bradawl we simply chip away a little of the material that is above the wire until the wire comes to be in a position exactly opposite to the hole on the other side, leaving a gap below. This is a

perfectly simple matter; at the same time it might possibly not occur to any one during the operation, I think it must be admitted that these cases show that the mode of treatment which I have recommended, when applied to recent transverse fractures of the patella, affords a means of restoring the joint to practically a perfectly natural condition, provided that no disaster occurs. But that is a tremendous proviso, and no one is more conscious of it than myself. Before I made the incision in the first case that I have recorded to-night, I remarked to those who were assembled in the theatre that I considered no man justified in performing such an operation unless he could say with a clear conscience that he considered himself morally certain of avoiding the entrance of any septic mischief into the wound. Supposing, on the other hand, that a man can say that with a good conscience, then I conceive that he is not only justified but bound to give his patient the advantages that we see are to be derived from this method of procedure. We know, of course, quite well that by ordinary means of treatment patients often recover with very useful limbs. Every now and then osseous union is obtained. It is a thing which I used to pride myself formerly on striving to get, and I have achieved such a thing, but it was rare, and it was obtained by a very tedious process; and if ligamentous union occurred, we never felt sure that what was a very short ligamentous union when the patient was discharged might not be a long ligamentous union at a later period.—*Weekly Med. Review.*

Wills; Bilateral Fracture of Femur, Etc.

(*Brit. Med. Jour.*): A boy, aged twelve years, was struck by a locomotive and dragged forty-five yards. He

was removed in an unconscious condition to the hospital. The right femur had suffered a simple fracture at its middle, and the left a comminuted fracture at its middle third; the face was bruised and lacerated so that he was scarcely recognizable. Consciousness returned the second day. The fractures were kept in position by sandbags, and it was not until the seventh and fifteenth days, respectively, for the right and left thighs, that splints could be applied, and then extension was made only by weights. In two months he was discharged, both legs being perfectly straight and as useful as ever. This case illustrates the rallying power of youth.—*Arch. Pediatrics.*

Fracture of Inferior Maxilla Treated with Silver-wire Suture.

Dr. J. CRAIG MILLER, of Lake City, writes: "John R—, a miner at the Ule mine, was thrown from the bucket and fell about fifteen feet. His inferior maxillary bone was fractured at the symphysis. I was sent for (four miles) and arrived about two hours after the accident; found the left half displaced downward about half an inch. It was replaced without difficulty and the teeth firmly fastened together with silver wire, and lead-water and laudanum applied. No other treatment. I thought the wire would be sufficient, as the seat of the fracture was directly in the centre, and it has so proved. The man is over forty years of age."—*Med. Record.*

Nævus.

Among a number of interesting cases of this affection that Dr. W. F. WESTMORELAND contributes to the *Atlanta Med. & Surg. Jour.*, the following is worthy of reproduction. The patient,

a negro, had an enormous nævus of the upper lip (see fig. 1). The history was



Fig. 1.—NÆVUS—FRONT VIEW.

that a "lump" existed on the lip since birth. The tumor as seen in figs. 1 and

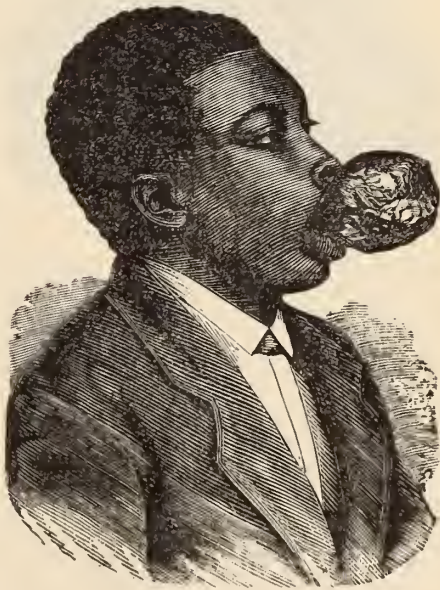


Fig. 2.—NÆVUS—PROFILE VIEW.

2, it will be seen, involves the entire upper lip and extends up, under and

above the ala of the nose, on the right side under the septum, separating it from the vomer and extending from a half to three-fourths of an inch in either nostril. There were several ulcerated points in different parts of the tumor, and also numerous cicatrices, the results of injuries received and of ulcers that had healed. He had had innumerable hæmorrhages, two of which were very profuse and nearly fatal.

The tumor was excised, only such parts being left as would not result in



Fig. 3.—NÆVUS—AFTER OPERATION.

deformity. A large amount of blood was lost despite the greatest precautions. The coronary arteries were very large and tortuous, and the clamps applied to control the flow of blood could not act effectually. Twelve days after the operation, all that portion of the vascular mass left from the first operation was destroyed. This also induced considerable bleeding. With a sharp knife the skin was detached from the malar bone, from the ala of the left side and vomer, and the incision so made that when brought together the result was as

shown in fig. 3. As will be seen from the engraving, it was necessary to extend the incision into the nasal cavity, excising a portion of skin and mucous membrane. Ten days after this operation the patient left for home.*

Operative Treatment of Malignant Affections of the Rectum.

Before the late International Medical Congress (*Brit. Med. Jour.*), Professor ESMARCH (Kiel) read a paper on this subject, in which he laid down the following propositions:

1. In the treatment of cancer of the rectum the same principles hold good as in the treatment of cancer of other parts of the body.

2. Extirpation should be as early and as complete as possible.

3. The more the surrounding healthy parts are removed with the diseased, the greater reason is there for hoping that recurrence will not take place at all, or will be long delayed.

4. Experience teaches that early and thorough extirpation may be followed by permanent recovery.

5. As, in cancer of the rectum, the lymphatic glands are secondarily affected at a comparatively late period, operation may be followed by permanent success when the disease has lasted some time and has become extensive. (Czerny observed recoveries which lasted above four years, although the cancer had been present three or four years).

6. The prognosis in regard to return of the disease is good in proportion to the slow development of the new growth, the delay in the appearance of distressing symptoms, and the completeness of the operation.

7. The simple cylinder-celled cancers (destructive adenoma and adeno-car-

*We are indebted to St. Louis Med. & Surg. Jour. for cuts.

cinoma), which proceed from the more superficial layers of the mucous membrane, generally give a better prognosis than the forms with small alveoli and the gelatinous forms, which more rapidly enter the deep submucous layers. The greater the disposition to gelatinous degeneration of the cancer, the more malignant, usually, is its course.

8. Extirpation of a cancerous nodule from the wall of the rectum is sufficient only when the nodule is well circumscribed and movable, and when only a part of the wall of the rectum or of the anus is implicated.

9. In all other cases amputation of the rectum beyond the points of the growth is indicated.

10. The entire rectum, as far as the sigmoid flexure, may be removed with good result.

11. The principal dangers of the operation are: *a*, hemorrhage; *b*, acute, purulent and ichorous inflammation of the connective tissue (septic lymphangitis, retroperitonitis and peritonitis).

12. These dangers are to be combated: *a*, by very careful hæmostasis during the operation; *b*, by very careful primary disinfection, and provision for the free escape of the secretions of the wound (by drainage and the avoidance of cavities).

13. In amputation of the rectum high up, opening of the peritoneal cavity is unavoidable; but peritonitis does not generally follow, if the opening be at once closed by suture under strict antiseptic precautions. Drainage of the peritoneal cavity is indicated only in exceptional cases (for instance, where considerable soiling of the peritoneum, during the operation, cannot be avoided).

14. The progress of operative skill has essentially diminished the dangers of the operation, the death-rate having fallen from 50 to 20 per cent., and even

lower; and it is to be expected, with confidence, that this proportion will become more favorable, as in ovariectomy, hysterectomy, etc.

15. The functional disturbance following amputation of the rectum is slight in comparison with the distress caused by the cancer. Incontinence of feces is not complete, especially when the external sphincter has not been removed. Systematic cleanliness, and the use of a suitable apparatus for closure, commonly relieve the difficulty.

16. Resection of a portion of the intestinal tube in its whole circumference, followed by suture of the two ends of the intestine, is not to be recommended, since the lower portion of intestine generally sloughs. It is better to remove the mucous membrane of the lower end, preserving the external sphincter muscle, and to fasten the upper end of the amputated rectum by a few sutures to the lower edge of the wound.

17. Extirpation of cancer of the rectum is, in all cases, rendered easier by dividing the posterior wall of the gut as far as the coccyx. Removal of the coccyx is generally unnecessary.

Prof. Verneuil (Paris) had done his first colotomy thirty years ago, and his first extirpation fifteen years ago. He at once found that removal of the disease was impossible. The patients objected or refused in many cases to allow the performance of colotomy. He then found that division of the cancerous stricture removed all complications, and gave all the other advantages of colotomy. The whole length of the stricture must be split. The incision was made from the tip of the coccyx by a thermal cautery plunged in to meet the tip of the finger hooked above the stricture. Through this channel, by a cannula, if necessary, an *écraseur-chain* was pressed,

and the rest of the division was completed. No blood was ever lost, and the symptoms at once ceased. No deaths followed.

Professor Trélat (Paris) denied the advantage claimed for the rectal extirpation, and pointed out the rapidity and malignity of recurrence. He quoted one case which, he said, was the type of many, where the removal of the cancer early, and when extremely small, was followed by a speedy and malignant recurrence. In one case he found, though the operation was normal and extra-peritoneal, that he had the small intestine in the artificial anus; and the patient died. He laid stress upon the color of the intestine as the only point of recognition that did not deceive, being white or grayish-white.

Mr. Sampson Gamgee (Manchester) preferred the operation of inguinal colotomy, while admitting that other operations had their indications, and that no one could prevail to the exclusion of others.

Mr. Marshall (London) mentioned some cases where sinuses had been kept open in the peritoneum by tangle-tents.

Professor Volkmann (Halle) observed that colotomy, even in Mr. Bryant's hands, was a very dangerous operation; and that the statistics of extirpation were better than those of colotomy, according to Bryant. Cancers, he said, varied in rapidity and malignity according to their locality; and in the rectum they had little tendency to infiltrate early and recur soon. Even in desperate cases he had no return under long periods; in one case not for ten years. The results of excision of the rectum had improved, and would go on doing so with improved methods. Asepsis and disinfection were normally powerful when the peritoneum was not opened, but, when this

was opened, the dangers were great and cleansing difficult. But, dangerous as extirpation was, it was not so bad as colotomy; and recurrences were painless and not troublesome. The comfort of patients was also infinitely greater than it was after colotomy, discomfort being hardly felt, save in diarrhœa. The selection of the cases, he went on to say, was also important; and he did not operate in any case where he could not reach the upper end of the disease by bimanual exploration under anæsthesia. The incision should be both forward and back to the coccyx, the anus alone being left; and no attempt should be made to unite the upper with the lower end, which should be stitched well down, and the cavities at the sides well drained.

Prof. Kuester (Berlin) said that in extirpation he always applied sutures when the peritoneum had been opened. Cauterization was a proceeding from which good results were got in most of the cases where a permanent cure could not be expected. He would select either this or extirpation; very seldom colotomy.—*Med. and Surg. Reporter.*

Parenchymatous Injections of Turpentine in Malignant Growths.

From a series of injections of turpentine into the interior of malignant growths in order to influence their development, Dr. VOGT reports (communications from the *Chirurgische Klinik in Griefswald*) as follows: The first case was a return after extirpation of a carcinomatous breast, which showed itself as a rapidly-growing tumor pressing forward from the anterior mediastinum. One-half of a Pravaz syringe-ful of a solution of equal parts of alcohol and oil of turpentine was injected. In a few hours there was a severe pain,

fever, and erysipelatous redness of the breast. After forty-eight hours the temperature declined, but the general malaise lasted several days longer; the tumor had become visibly contracted. In ten days a second injection was made, with the same effect at first, but afterward an abscess formed. Two more injections were made during the next few weeks. In the course of two months a gradual shrinkage of the tumor took place, which then remained as a decidedly hard tumor without any abnormal heat. The patient was then discharged.

The second case was one of multiple sarcoma, which was treated in the same way, with the same results, including the abscess. In the course of five weeks, after repeated injections, the tumor had almost disappeared.—*Centralblatt für Chirurgie*.—*Med. Med. Journal*.

Treatment of Leg Ulcers.

Dr. ROBERTS has recently had excellent results in chronic ulcers of the legs, after sprinkling powdered chloride of sodium thickly over the surface of the ulcer, once every three or four days, and dressing the sores twice daily with corrosive sublimate ointment. The ointment contains half a grain of the mercuric chloride to the ounce of cerate. Chronic ulcers with callous edges are often most expeditiously treated by the surgeon excising them by means of an elliptical incision, and closing the wound with sutures.—*Ibid*.

The Use of Crushed Ice and Lard in the Treatment of Burns and Scalds.

In the *Æsclepiad*, the treatment of burns and scalds by crushed ice and lard is warmly advocated by Dr. BENJAMIN W. RICHARDSON. To put the

method into practice, ice is well crushed, or scraped as dry as possible, then fresh lard is admixed until a broken paste is formed. The mass is then put into a thin cambric bag, laid upon the burn or scald, and replaced as required. The pain is rapidly eased, and its return is the call for the repetition of the remedy. This mode of treatment is as scientific as it is simple. It saves at once the fever incident to pain, and it leaves very little contraction of the surface.

A New Bandage Suggested for the Treatment of Chronic Ulcers.

Dr. CLARENCE W. HEFFENGER (*Med. Summary*): In writing this article, I intend it merely as suggestive, and as such wish it to be taken for what it may be worth. The reason of this is my lack of that most essential thing of all new methods of remedying disease, namely, clinical experience.

My firm conviction of the efficacy of this bandage for the purpose for which it is intended has caused me to arrange a mode of dressing to be used in connection with its application.

The bandage is an ordinary rubber one, perforated in its entire length, the size and relative proximity of the perforations being determined by the needs of the case, or the fancy of the surgeon. This perforated bandage can be manufactured by the surgeon himself in a short while, by taking, for instance, the rubber bandage of Mr. Martin, or any other of good make, and with a saddler's punch making the necessary number of perforations; and can still be more easily and better accomplished by employing the plaster perforator described by Prof. J. P. Remington, in the *American Journal of Pharmacy*, consisting of a wheel attached to a handle, said wheel containing sixteen punches, which can

be rolled over the bandage with the desired effect. In the treatment of chronic ulcers elastic pressure is recognized as one of the best methods we possess for dealing with this class of troublesome and unsatisfactory cases. Now, the special advantages I claim for this dressing are cleanliness, and continuous pressure, combined with perfect drainage (this latter the great desideratum in the treatment of suppurating surfaces). For example, suppose we have before us an old, indolent ulcer of the leg, of large extent, worm eaten appearing surface, and secreting an offensive discharge. Such an ulcer I would dress in this wise: First, the free use of a deodorizing wash, say a solution of permanganate of potassium in tepid water; then, after drying, I would apply my perforated rubber bandage, from below upward, evenly and with moderate and equalized pressure. Secondly, cover this completely with sufficient absorbent cotton to take up all discharge until the next dressing. Thirdly, apply over the cotton an ordinary cotton bandage, with enough firmness to hold it in place. In this dressing the good effects of elastic pressure are obtained, whilst this pressure produces free drainage through the perforations, where the discharge is at once absorbed by the cotton. The dressing can be changed daily, when the bandage may be washed with soap and water, and then reapplied as before; or the surgeon, if he be a disciple of Lister, may apply the whole with antiseptic precaution.

This is the "sum and substance" of my mode of treating chronic ulcers by elastic pressure, and if any of the readers of this article should think it worth their while to give this method a clinical trial, I will be pleased to hear from them as to the result.

VENEREAL DISEASES.

Treatment of Gonorrhoea.

Dr. L. C. SCHUTT, of Ft. Wayne, Ind., sends us the following: There are a great many remedies used for the above-named disease, and all of them, no doubt, produce good or bad effects according to the skill of the individual using them. I wish to give two prescriptions which, if properly used, I think will give general satisfaction. They can be used either in the acute or chronic stage with equally good results.

Injections: \mathcal{R} . Muriate hydrostine, grs., xv.; glycerine, 3 i.; fl. ext. yerba reuma, 3 ss.; inf. sassafras (strong and fresh) \mathfrak{z} ij. Sig. Inject 3 to 5 times a day.

Internally: \mathcal{R} . Fl. ext. kava kava, 3 i.; fl. ext. stigmata maidis, \mathfrak{z} ss.; tr. cubebs, \mathfrak{z} ss. M. Sig. One teaspoonful 4 or 5 times a day.

Unusual Form of Urethral Stricture.

A man, 48 years of age, was brought into the Hospital Lariboisiere in a condition of profound prostration. He stated, after much questioning, that he had urinated without any difficulty up to ten days before, but since that time he had not been able to urinate at all, although he had lost considerable blood by the urethra. Several attempts at catheterism had been made unsuccessfully during that time. The bladder was greatly distended, and was relieved of its contents by aspiration, after another attempt at catheterism had failed. It was found that there was an impermeable stricture in the membranous urethra, and something grated upon the sound as the instrument was passed along the urethra. The urine was bloody and ammoniacal. The patient felt very cold, was drowsy; the tongue was dry. Rectal touch did not discover hyper-

trophy of the prostate nor tumor of the *bas fond*. The condition of the patient gradually grew worse, although the vesical puncture was performed twice daily. The patient finally became comatose, and died on the fourth day after admission. Upon examination, the urethra was found to have a deposit upon its mucous membrane, throughout its entire length, of a thin, yellowish layer, firmly adherent to the subjacent tissues, which under the microscope was found to consist of ammonio-magnesian phosphate. The stenosis was found at the place of election in the membranous urethra, where the tube was completely torn by the efforts of the catheterism. The bladder was soft and friable at certain places. The ureters were a little dilated, and also the pelves of the kidneys, which were very much congested. The liver was fatty.—*Le Progres Medical*, No. 32.

A New Preparation of Mercury.

A new mercurial preparation, to which the name *hydrargyrum tannicum oxydulatum* has been given, is described by its sponsor, Dr. G. LUSTGARTER (*Wien. med. Wochensch.*, 1884, Nos. 11 to 14), as a dark, yellowish-green, odorless and tasteless powder, which does not change by keeping, and is easily assimilated when administered by the mouth. The dose is one-tenth of a gramme, and is given with milk-sugar in capsules, one-half to one hour after meals. The iodide of potassium, it is stated, cannot be safely used at the same time, on account of the danger of too large an amount of the iodide of mercury being formed. It is asserted of this preparation that it is not liable to cause stomatitis or salivation, nor to give rise to any trouble in the digestive tract. Its action in syphilis, in the few cases in which it was tried, is described as favorable.—*N. Y. Med. Journal*.

The Abortive Treatment of Soft Chancre.

Such is the promising title of a paper by HANS VON HEBRA (*Wien. med. Presse*, xiv 1884), in which are reported ten cases of non-infecting chancre successfully treated by local applications of salicylic acid; though, so far as they go, the results are excellent, the number of cases is far too small to warrant general conclusions. The method consisted in applying pure salicylic acid directly to the ulcer, care being taken not to allow it to touch sound parts, after carefully washing the affected member with warm water. The acid is covered over with a piece of lint, and a strip of adhesive plaster is placed over all. We are cautioned to wash off any remains of previous applications—as of lead, zinc, or mercury—with soap and water, since salicylic acid is liable to combine with these substances and prove more caustic than we wish. If the ulcer is of a mild type, the dressing need be removed but once in twenty-four hours; but if there is a good deal of secretion, it should be changed twice a day. During the first day the ulcer covers itself with a white scab, while the surrounding parts become red. After the third day, by which time the scab attains a considerable size, the use of the acid must be stopped. The subsequent treatment consisted in the use of some emollient ointment, under which the scab became detached in half a day, leaving a healthy raw surface, which healed in from two to three days. The writer states that by this method the sore heals in as many days as it takes weeks to heal it by other methods. The treatment is said to be almost painless, and is also very cleanly. In none of his ten cases were there any buboes. [It may be mentioned that this same method of treatment was in use in this city five or six years ago.]—*N. Y. Med. Journal*.

Cystitis and Irritation of the Prostate.

Dr. R. A. REED, in an able article in *Med. Gaz.* on the subject, gives the following differential points.

Cystitis.

A constant desire to void the urine.

Great straining and tenesmus during micturition.

Urine ammonical, high colored and often loaded with mucus and pus.

Little or no tenderness of the prostate.

Pain and uneasiness over the pubes.

Epithelial casts of the bladder.

No cast of the prostatic ducts.

No pain in passing the catheter, except after reaching the bladder.

Desire for copulation not increased, but usually diminished.

Generally marked constitutional disturbances.

Irritation of the Prostate.

Micturition more frequent, but not a constant desire, which is increased toward the afternoon and evening.

Weight and bearing down in the perineum. A slight smarting or tingling as the urine passes the prostate, accompanied with a prickling or burning sensation in the glans penis.

Urine not much changed, excepting it is abnormally acid, and more highly colored.

Marked tenderness over the prostate.

Pain and uneasiness in the perineum.

No epithelial casts of the bladder.

Casts of the prostatic ducts in the catarrhal form of irritation.

Pain in passing the catheter marked along the prostatic urethra.

Desire for copulation increased rather than diminished.

Seldom any marked constitutional disturbances.

Treatment of Orchitis, Mechanically and with Pulsatilla.

Dr. H. M. LAWSON reports (*Southern Medical Review*) good results from the following procedure in the treatment of inflammation of the testicle :

"Take a piece of cheap, thin homespun, about three and a half inches long and three-fourths of an inch wide ; double it the long-way and sew the edges together ; then fill with cotton, not too tightly ; sew a button on one end and make a button-hole in the other ; this, when buttoned, will form a ring. All that is necessary in addition to this is a piece of the same kind of homespun four inches square. Apply

as follows : Put the centre of the square piece of cloth to the centre of the swollen testicle below, bring the edges and corners up around, completely inclosing it, then button the ring around above the testicle, which will hold it in position. Now draw upon the edges and corners of the square piece all around until sufficient compression is made. The sound testicle is to be left above the ring,

If too much compression is made, it is easily removed by drawing the cloth in the opposite direction : it is easily increased or diminished at will. Its other advantages will be apparent on using it. Easily obtained, applied and

adjusted, I feel sure that no one who tries this method will afterwards use any other."

In this connection we take the opportunity of reporting our experience with pulsatilla in a recent case. A gentleman suffering from a slight stricture and a gleet discharge, was attacked with epididymitis and orchitis. His social condition made it a delicate matter for him to consult his family physician, and he allowed himself to be treated by a friend who had been "through the mill," and who prided himself on his ability to "fix these things better than any doctor." Rest in bed and the application of an infusion of golden seal, the treatment administered, did not, however, check the inflammation, and we were consulted. The testicle was immensely swollen, the scrotum being tense and shining from its pressure. Here was an opportunity to test the claims recently made for pulsatilla in small doses in this affection, and we ordered two drops of the tincture to be taken in a little water every two hours. The effect was apparently magical, the scrotum becoming wrinkled and the pain and tenderness subsiding so soon after the third dose that we were skeptical as to the effects of the medicine, being inclined to regard the subsidence of the inflammation as a coincidence occurring in the course of the natural history of the affection. An opportunity soon offered, however, to verify the action of the pulsatilla. After the patient had fully recovered and had been attending to his business for a week, the gleet discharge still continuing, the other testicle was attacked, and when we saw the case the inflammation was well developed. Two drops of tincture of pulsatilla were ordered as before, the scrotum placed in a suspensory bandage and the patient instructed

to continue his business. The course of the inflammation was promptly checked, the pain subsided and recovery was complete in two days.

DISEASES OF THE SKIN.

Treatment of Lupus by Pyrogallic Acid and Mercurial Plaster.

Dr. SCHWIMMER reports (*Wiener Med. Wochenschrift*), that after trial of the various methods of treatment upon lupus patients, he has found none which, *when employed singly*, can be pronounced suited to every case. Severe local measures are capable in certain cases of doing more harm than good. Among the most useful means of treatment must be reckoned pyrogallic acid. Applied in the form of an ointment (10 to 15 per cent.) three or four times daily, it soon transforms the morbid growth into a pulpy, grayish substance. Although the cicatrix looks clean after this treatment, it almost always contains tubercles, which in many cases renew the disease. To prevent this result he hit upon mercurial plaster, which he employed in conjunction with the former. The pyrogallic acid is seldom able to produce the total destruction of the lupus tissue alone, and it is well known that the gray plaster has little influence upon the lupoid infiltration by itself; but by using the acid to destroy the lupus tissue, and the plaster afterward to promote absorption, they act very efficiently. In a series of very malignant cases he pursued with success the following course:

For several days after admission the diseased surfaces were kept completely covered with vaseline smeared on cloths, in order to facilitate the removal of all secondary morbid products, such as scabs, etc. A ten-per-cent. pyrogallic

ointment was then applied over the same area, and renewed two or three times in the twenty-four hours. This dressing was employed from four to six days, or, in cases where the cutaneous tissues were insensitve, for six or seven days. On its removal, vaseline was again applied for one day, after which the entire suppurating surface was covered with mercurial plaster. Healing began in from ten days to a fortnight in most localities, but isolated nodes and tubercles could still be detected in the cicatrized integument. Pyrogallic acid was now once more applied for three or four days, causing renewed suppuration of the partly-healed infiltrations, while those more firmly skinned over remained unaffected. When treatment was repeated, so much pain in many cases was experienced on the second day that mercurial plaster had to be at once substituted for the ointment; but if this was not the case, the latter was left on for two days longer. The gray plaster was allowed to remain—being changed once daily if the suppuration was trifling, twice or thrice if it was more profuse—until cicatrization was complete, which sometimes required four weeks. When the complaint was peculiarly indolent and obstinate, the same process was gone over for a third time, but treatment never extended further than this.

An accurate and unprejudiced comparison of the results obtained in this way, with those following other methods, has proved decidedly favorable to the former. A speedier and much better resolution of the most advanced and wide-spreading morbid growths was found to occur under the combined pyrogallic and mercurial treatment, than could have been brought about by the united agencies of scarification and the thermo-cautery.

In conclusion, he states that, in order "to make our estimate more precise, and to obviate any misconception which might cause the means I have recommended to be regarded in the light of a *lupus-panacea*, I present the following summary of the objects which they may reasonably be expected to accomplish:

"1. The severest and most extensive forms of lupus—those hitherto most difficult and frequently impossible of management—may often be essentially ameliorated by these simple and comparatively painless procedures.

"2. The application of mercurial plaster, immediately after several days' use of pyrogallic acid, is able to bring about complete absorption of the tubercles and infiltrated cells at some points; while at others it is remarkably effective in arresting the morbid growth and forming complete and smooth cicatrices, results which are not attained by the use of either remedy alone. The combined treatment may be employed two or three times in succession without any inconvenient consequences.

"3. The more circumscribed forms of lupus are *less* amenable to this method than the diffuse, serpiginous, and ulcerated varieties,—perhaps for the reason that in the latter the corium affords a less congenial breeding-place for the morbid cells. Yet sometimes, in these same cases, better results are obtained through a previous deep scarification of the affected parts, although scarification alone will prove entirely ineffectual.

"4. The duration of treatment is shorter than under the other methods, not exceeding three or four months in the worst cases.

"5. Relapses are to be looked for here no less than after other processes, but are least to be apprehended when the treatment has been thoroughly car-

ried out,—*i. e.*, has terminated in uniform and complete cicatrization.

"6. This method is indicated in the most extended forms of lupus, whether occurring on the face, the body, or the extremities, and is especially suitable in neglected cases which have received no previous treatment.

"7. The affected surfaces, after healing, retain their redness for a considerable period. The discoloration gradually fades, however, and its disappearance can sometimes be hastened by using an ointment of bismuth or zinc."
—*Glasgow Medical Journal*.

Treatment of Acute and Chronic Urticaria with Bromide of Ammonium.

Dr. JOHNSON: Within the last ten days I have treated three cases, two acute and one chronic, of urticaria with bromide of ammonium. The first case was that of a grocer, whose attack came on very suddenly about four o'clock in the evening. I saw him two hours afterward, and he told me that he was taken a year ago in exactly the same way, with violent hives, and that in two days the attack was followed by facial erysipelas. His face and hands were red and swollen and covered with hives, and he was rubbing and scratching in the most active manner. I prescribed the following: *R.* Bromide of ammonium, 3 ij.; aqua destil., 3 vj. *M.* Sig.—Shake well and take a tablespoonful every two hours.

I directed him to take in addition ten grains of blue mass at bedtime and a dose of epsom salts in the morning. His urticaria disappeared during the night, and he had no return of it.

The second case was that of a clerk. He had been eating fish for a day or two, when suddenly violent urticaria made its appearance. I prescribed for

him: *R.* Bromide of ammonium, 3 ij.; aqua camphor, 3 vj. *M.* Shake the vial well and take a tablespoonful every two hours.

After the second dose his hives began to get better, and the next day they disappeared, without a return of them.

The third case was that of a young lady. She informed me that she had had the hives for three months. That they did not trouble her during the day, but just as soon as she got in bed at night they would come on and torment her dreadfully for two or three hours. I found nothing wrong with her but the hives, and I prescribed: *R.* Bromide of ammonium, 3 j.; aqua destil., 3 vj. *M.* Shake the vial well and take a tablespoonful every three hours.

In four days she returned to thank and inform me that the mixture had cured her hives.

Napthol in the Treatment of Scabies.

Dr. SAMUEL RONA has treated a number of cases of itch by a ten to twenty per cent. solution of napthol in oil. If chronic eczema coexist the solution should not be stronger than two or three per cent. In upward of a hundred cases in which the remedy was tried the author never saw any symptoms of poisoning, the only effect of using too concentrated solutions being the production of eczema. The application should be made in the evening, all the parts affected with scabbies being thoroughly rubbed with the preparation. The next morning the patient takes a bath, and all the surface reddened by irritation of the napthol is dusted with rice powder. Usually one application is sufficient for a cure. Sometimes an intense itching persists for some days, but this was attributed to the coexisting eczema.—*La France Medicale*.

Herpes Zoster.

In a clinical lecture delivered at Jefferson College, Dr. ROBERTS BARTHOLOW, in speaking of herpes zoster, said: In the treatment of this affection, the remedies are to be more particularly addressed to the nervous system. Recognizing the fact that it is an affection of the trophic filaments of the cutaneous nerve, we can treat the case intelligently. There are many remedies which can be used. One of the best preparations is chloral camphor, in which morphia has been dissolved. \mathcal{R} . Camphoræ; chloralis, aa 3 j.; morph. sulph. gr., x. \mathcal{M} . Sig. To be painted over the affected part. This solution applied to the affected part relieves the pain and promotes healing. A mild stable galvanic current, direct, is also a most effective remedy. If the pain is severe, the hypodermatic use of morphine may be required, or by the stomach a full dose of quinine and morphine may be given. As it is a self-limited disease, we may content us with local anodyne applications, and await the effect of time.

Burdock Seed in Psoriasis.

Dr. A. B. POOR, of Cedar Rapids, Ind. (*Jour. Cutan. and Ven. Dis.*), reports two cases of psoriasis of ten and twelve years' standing respectively, as cured by tinct. of burdock seed in doses of fifteen drops t. i. d. In one case the disease recurred two months after cure, but again disappeared upon renewal of the treatment. In the other case the treatment has been kept up in smaller doses ever since the disappearance of the lesions.—*Med. Med. Jour.*

DISEASES OF THE EYE AND EAR.**Periodical Exophthalmus, Sinister, on Bending the Head.**

Dr. MAGNUS (*Kl. Monats bl. fur Augenheilkunde*): A boy of 13, on whose eyes nothing abnormal was seen, only on bending the head, the left bulb would extrude, but which receded into the orbit on assuming the erect position. This phenomenon was noticed since birth, and was probably congenital. On close examination M. found beneath the caruncle a cavernous plexus of veins, which filled up the entire nasal side of the orbit and a part of its roof. This became congested on bowing down and caused the extrusion of the bulb. No pulsation perceptible.

Similar venous plexuses were found under the skin of the brow, the nose and the angle of the mouth, all on the left side. Vision was not disturbed in the protruded eye, but a sensation of pain and fullness was always present.—*St. Louis Med. and Surg. Journal.*

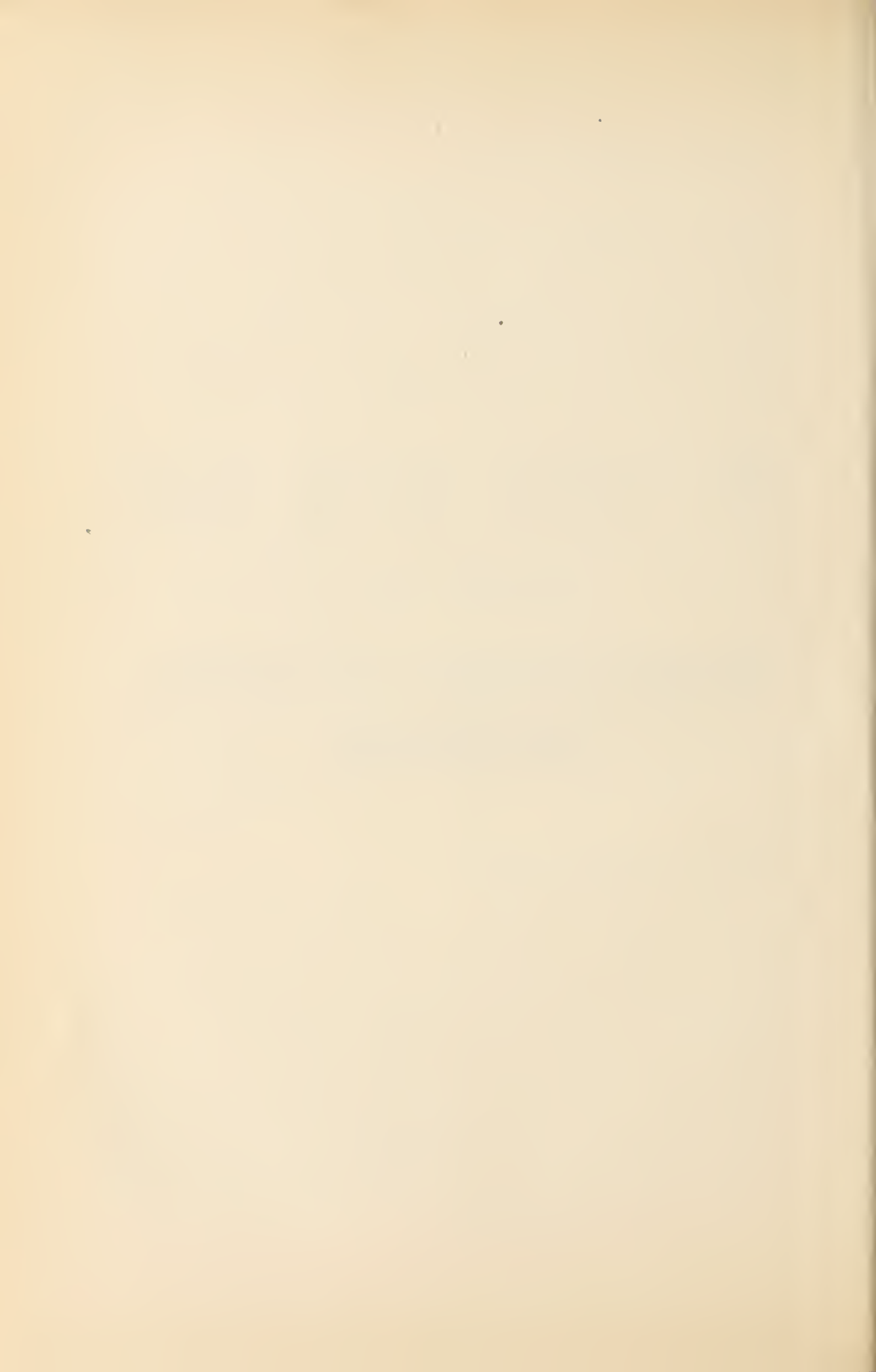
Effect of Hot Baths and Footbaths upon the Circulation of the Blood in the Eye and the Intraocular Pressure.

KATZAMOW (*Wratsch*): Many experiments have demonstrated, that intraocular pressure diminishes while in the bath; it increases in 8-10 minutes after coming out of it, the papilli became redder. Full baths as derivants should not be given; hot footbaths, are less objectionable, although even then the redness of the papilli and intraocular pressure does not perceptibly lessen. Consequently, arterial hyperæmia of the posterior aspect of the eye contraindicates the use of hot baths and footbaths.—*Ibid.*

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children,
and Obstetrics.



DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

DISEASES OF WOMEN.

Investigations in Regard to Menstruation and Ovulation.

LEOPOLD, of Dresden (*Archiv. für Gynakologie*, XXI., 3; *American Journal of Obstetrics*), who has done so much good work in this, as well as in other fields of gynecological research, pertinently alludes to the difficulty of arriving at positive conclusions upon this subject, in respect to which his own investigations began to be published in 1877. The changes which menstruation causes in the condition of the uterine mucous membrane; the relations of menstruation to ovulation, whether the maturation of an egg is periodical or not; whether the corpus luteum represents a typical transformation; whether ovulation precedes or follows menstruation; and how, as to time, menstruation, the rupture of a follicle, and a consequent pregnancy, are related, are subjects and questions in regard to which nothing is settled and positive. The author addresses himself in this paper to the question, as to the relation, in regard to time, of the maturing of an egg, the rupture of a follicle, and the formation of a *corpus luteum* at the monthly flow. Six years have been occupied in examining material, which was removed from women who had undergone castration, or who had died only a short time before such removal. Twenty-nine cases are included in his series, covering periods of time which vary from the first to the thirty-fifth

day from the beginning of the last menstruation. The microscopic appearance in each case is also represented in beautiful lithographic plates, thus adding to the interest and the value of the work. Valuable as are the facts obtained by the analysis of these cases, the author does not regard them as establishing fixed principles. They are rather to be considered as a contribution of probabilities which will some day enter into the argument whereby these principles will be established. As regards the Graafian follicles, the probabilities are that one or more are always present in a mature condition; any great excitement, coitus, for example, may rupture one, either at once or on the following day; hence a healthy woman is liable to conceive at any time during the child-bearing period. If pronounced anemia, or chronic inflammation of the ovaries exists, it is probable that conception will not occur, though menstruation may be regular, the cause being that the follicles are poorly nourished and do not rupture and discharge their ova. Two or more contiguous follicles may coalesce and rupture simultaneously; this may have a bearing upon the question of multiple pregnancy. These follicles vary in size, and yet may be equally mature. Their distension with blood may be the cause of dysmenorrhœa. The second series of probabilities is with reference to the corpus luteum. In the first day of its history it is a ruptured follicle filled with blood; on the third day it is a

large blood cavity. From the eighth day appears a fine border, while the centre of the cavity remains distinct. From the twelfth day the border becomes thicker, and folds are developed in it. From the sixteenth day it assumes a yellow tinge. About the twentieth day the cavity begins to contract, the border becomes yellower, and sends out rays in the shape of narrow folds toward the centre. Contraction continues from the twenty-fourth to the thirty-fifth day, the latter being the limit at which these observations were made. Corpora lutea are typical and atypical, the former beginning during the menses, the latter between them; and since the latter originate during the ebb of the pelvic tide, they are not so well provided with nourishment, and hence have a briefer history. It is therefore evident, if the foregoing be true, that menstruation may occur without ovulation, likewise that ovulation may occur without menstruation; a mature follicle may rupture at any time. The following propositions in regard to menstruation are also offered: it is a phenomenon which is peculiar to the female organism, the origin of which is in the ovaries, its means of external expression in the uterus. On account of its periodicity, it is to be reckoned in the category of other rhythmical vital phenomena, as the pulse and the respiration. Proof that menstruation is fundamentally a function of the ovaries lies in the fact that their removal causes its disappearance. It is true that the uterine mucous membrane shares in the recurring monthly congestion of the pelvic organs, but it must be borne in mind that the periodical congestion of the ovaries has probably long existed before the uterine menstrual phenomena appear. The latter is also greatly influenced by constitutional conditions.

It is probably safe to say that the external manifestation of menstruation is entirely dependent upon the anatomical condition of the uterus, especially as to its mucous membrane. According to Pflüger, the exciting force of menstruation is the continuous growth of the ovules, and the Graafian follicles, but not their periodical maturation.

As has been already remarked, much remains to be cleared up and settled in regard to this comprehensive and important subject. The outline is sketched by the author in the following suggestions: 1. The process by which the follicle is opened and the time when it occurs, whether at a period or between periods, is to be carefully investigated. This will require the collection of many specimens, and the further study of the typical and atypical corpus luteum. 2. The tubes, as well as the uterus, in normal cases, must be interrogated just after an ovule has been liberated from the ovary. Fresh specimens from castration operations will be of avail for this purpose. 3. We must find out whether ovulation ceases before the menopause occurs, and how long a time before; also whether it begins before menstruation, and if so, how long before. 4. Whether, in severe cases of anæmia and similar troubles, the maturation of follicles is delayed or is entirely placed in abeyance. 5. Whether follicles which have coalesced mature, and discharge their collective contents, at the same time. 6. What significance attaches to the blood-follicles?

Dysmenorrhœa.

Dr. BARKER, of New York, believes (*Am. Jour. Obstet.*) that mechanical obstruction as a cause of dysmenorrhœa exists in only a small percentage of cases; that there are two forms of the

disease, one uterine and the other ovarian. In the uterine variety, there are cases which do not depend at all upon obstruction; the pain is due to the effort of the uterus to relieve the plethora by the rupture of capillaries and exfoliations of mucous membrane. He uses the lactate of iron in doses of from three to five grains three times a day, associated with chlorate of potash; as soon as the symptoms of menstruation begin he gives apiol, which he looks upon almost in the light of a specific. In ovarian dysmenorrhœa, there is no pain until the flow has continued for two or three days; then the cause was ovarian, and the bromide of sodium in ten to fifteen grain doses in the middle of the forenoon, in the middle of the afternoon and at bed time, was the proper treatment.

[For years we have insisted upon the fact that pain during menstruation is often due to disease of the ovaries. Painful ovulation also is often mistaken for dysmenorrhœa, and hence many of the conflicting views regarding the treatment of this disorder of menstruation. We are glad to have such valuable information on this subject from so reliable an authority as Dr. Fordyce Barker.]

A. J. C. S.

Dysmenorrhœa.

The *Lancet* devotes an article to a critical review of a recent paper on this subject, in which it takes occasion to declare in favor of constitutional as opposed to local treatment of the conditions to which dysmenorrhœa is due:

"There are few subjects more worthy of sound study than dysmenorrhœa. It has received for the last fifty years more attention at the hands of gynecologists than ever before. But still it cannot be said that authorities are agreed on its essential causes. For a long time it

came to be regarded as eminently a case for treatment by specialists. The mechanical theory for its causation largely ruled practice, in some few cases with brilliant relief, and perhaps cure, in others without success, and often with the effect of adding to the mischiefs which it was intended to remove. The very nature of the complaint, and the fact that in its serious forms it affects chiefly unmarried women, render the complete investigation of it a matter of much difficulty. The existence of more or less dysmenorrhœa in the majority of women is a fact. Even those who are unwilling to recognize in this fact any argument against the capacity of women for competing in the labor market with men do not deny that in a large proportion, nearly fifty per cent., this dysmenorrhœa is considerable in amount.

We have before us a paper by Dr. John Williams, on the Natural History of Dysmenorrhœa, which was read last year before the Obstetrical Society of London. We can do little more than to direct attention to Dr. Williams' principal conclusions from a large and painstaking observation of several hundred cases. He divides his cases into two sets—firstly, cases of primary dysmenorrhœa; secondly, cases of acquired. The acquired cases are so few (22), compared with the others (873), that we need not here allude to them. It is not easy to do justice to the details which constitute the interest of such a paper as the one under notice. His conclusions are as follows:

1. Dysmenorrhœa should be studied first under the least complex conditions—in single women.

2. Dysmenorrhœa in single women is rarely acquired; it is almost invariably primary—viz., it appears with the menstrual function.

3. Dysmenorrhœa in a few, but rare, cases ceases spontaneously a few years after puberty.

4. Marriage, if sterile, aggravates the disorder in many cases; it is only very seldom that it relieves the pain.

5. Child-bearing cures a large number of cases, and it is not impossible that were all puerperal complications excluded it would cure every case.

6. The proportion of sterile to fertile women subjects of primary dysmenorrhœa is one to twelve.

7. Menstruation begins in women who become sufferers from primary dysmenorrhœa at about the estimated average age for the appearance of the function in London.

8. Menstruation is regular in about two-thirds of the cases, and irregular in about one-third.

9. The menstrual fluid is profuse in about two-fifths of the cases, scanty in about one-half. It contains clots or shreds, in about three-fourths.

10. The changes which take place in the fluid in the course of dysmenorrhœa are various, and cannot at present be classified.

11. The uterus is imperfectly developed. It may be too short, or too small in volume, or it may be defective in both respects. The cervix may be conical, and the os small and round, but stricture of the canal in any part of its course is infinitely rare.

12. The changes in uterus due to dysmenorrhœa are slight hypertrophy, erosion and eversion of the mucous membrane of the cervix, and catarrh. The cavity increases but little in length, for after years of suffering it measures rarely more than two and a half inches in length. In the early stages, the tissues of the uterus are in some cases soft; in the more advanced, hard.

13. The hypertrophy of the uterus is

probably the result of periodical increased muscular action.

14. Ovaritis and perimetritis are possible consequences of dysmenorrhœa.

15. The menstrual pain is the result of spasm of the uterus, excited by the separation and expulsion of shreds of decidua and clots, in an organ whose sensitiveness in the performance of its function is enhanced by inappreciable conditions of tissue dependent on imperfect development, often associated with others, such as anæmia."—*Med. Age*.

The Mechanical Theory of Dysmenorrhœa.

The *Lancet* closes an appreciative and just review of Herman and Vedeler's researches (already summarized in our columns) with the following remarks: These figures show that the same proportion of women suffer from dysmenorrhœa, be the uterus straight, slightly flexed or acutely flexed. It appears, then, that, from whatever point these observations are examined, they lead to the same result—a result which entirely removes the ground from under the feet of the advocates of the mechanical theory of uterine pathology. These facts have been sought for, not in states of disease simply, but also in states of health; and, unless the accuracy of the observations can be impugned, and the error pointed out, the pathology based upon the mechanical theory must be discarded and replaced by another more consonant with the anatomy and physiology of the organs concerned.—*N. Y. Med. Jour.*

Some Points Connected with the Subject of Dysmenorrhœa

Was the title of a paper by Dr. C. D. PALMER, of Cincinnati, in which the mechanical theory was characterized as

plausible and natural, and was stated to have received a great impetus from the writings of Sir J. Y. Simpson and Dr. Marion Sims. The theory had continued to be questioned, however, and, although generally still accepted, and, although doubtless applicable in a certain number of cases, it was questionable if it could count for much in the general ætiology of dysmenorrhœa. The plausibility of the theory was strengthened by the temporary benefit so commonly produced by dilatation and other operative procedures calculated to relieve stenosis. There were several reasons why, the speaker thought, the theory should not be held to cover the general run of cases—chiefly included in the proposition that the pain was not proportionate in intensity to the amount of the obstruction present, and that the most intense pain was often present without any obstruction whatever, while in cases of marked narrowing or sharp flexure of the uterine canal there was frequently not the slightest pain. On the whole, the obstruction theory could not be regarded as established. In many cases there was a state of the endometrium that might be called neuralgic—a condition that made it exceedingly sensitive on the passage of a sound, and that was aggravated by the congestion incident to menstruation, also by the contact of clots, etc. In a fixed uterus, hampered by the mere fact of the deformity, the tissue of the organ could not yield and swell during the menstrual congestion as it ought to do, so that the pain was the result of compression. In general, the affection was a neurosis, due to defects of the system at large, which latter might be an error of nutrition or an altered action of the nervous system.

In regard to treatment, in young women local measures should be omitted,

at least at first. It was improper to regard every case of dysmenorrhœa as calling for such treatment. To correct derangements of the system was our first duty. Local treatment might prove to be needed in the end. Iron would do much good in cases of scanty flow, and arsenic where the flow was profuse or too frequent. Electricity was uncertain in its effects. Sometimes corrosive sublimate and iodide of potassium, in small doses, continued for months, the author had often found useful. The same was true of moderate doses of tincture of *cimicifuga racemosa* and tincture of *pulsatilla*, during the periods. Opiates were to be given only with the greatest caution, and only where absolutely required. Dilatation of the uterine canal should not be resorted to until medication had failed; and this measure did not really operate by dilatation, but partly by blunting the sensibility, and partly by rupturing circular muscular fibres. It was best done by graduated bougies, or with two-bladed dilators. Incision of the cervix, the author thought, had been much overrated, and resorted to far too often. Its field had now, with the lapse of time, been considerably limited.

Massage of the Uterus.

The scientific manipulations comprised under the term uterine massage may be divided into four groups: 1. Those intended to benefit lesions of which the seat is easily accessible from the exterior; 2. Those which are applied to all the lower abdominal region, and which often constitute a preliminary operation; 3. Massage of the uterus through the abdominal wall; and 4. Bimanual massage through the vagina and abdominal wall combined. The cases of the first group are generally in superficial subperitoneal exudations, or

else situated in the abdominal walls above Poupart's ligaments. Often it is necessary to apply massage to the hypogastric region. The bladder is emptied, and the patient placed upon her back on a resistant surface. The operator catches up and presses between the palm and the fingers the skin and superficial tissues. The whole abdominal wall, as far up as the umbilicus, is submitted to this treatment. Then the deeper tissues are subjected to it. These pinchings should be alternated by frictions with the fingers and palms of the hands, the whole operation lasting five or ten minutes. The skin should be previously oiled, and great delicacy be used in the manipulations. In many cases, the pains appear to be situated in the abdominal wall, and the masses gradually abolish the sensibility. After this, one may, if necessary, apply massage through the vagina and abdominal wall simultaneously. When an hypertrophied uterus, for example, can be grasped between the fingers, the hands may be applied flat on the abdomen, the fingers directed toward the pubis; then, by short and steady pressure, the masseuse seeks to grasp the uterus and knead it. More often, it will be necessary to apply massage through the vagina. The index and middle finger of one hand are introduced into the vagina, and their extremities, carried into the posterior cul-de-sac, push the neck forward several times, so as to give mobility to the whole uterus. The other hand is placed on the abdomen, and grasps the uterus, the fingers in the vagina serving as a fixed point. When the organ is grasped, it is steadily compressed between the fingers of the two hands for several seconds. This is alternated by lifting up the uterus. Then, the two fingers being placed in the anterior cul-de-sac, the movements already

described are repeated. The uterus should be grasped, as far as possible, between the fingers, and subjected to intermittent pressure or kneading. Jackson has recommended that the fingers be also introduced into the rectum. Displacements of the uterus, flexions, and versions have been frequently treated by massage, but without signal success. Better results are obtained in chronic metritis, and especially in cases of old pelvic peritonitis. Massage is positively contra-indicated in any acute accidents or a tendency toward acute manifestations. — *Journal de Med. de Paris*.—*Medical News*.

Good Advice Concerning Laceration of the Cervix Uteri.

Apropos of hemorrhage as a result of laceration, Dr. WILLIAM T. LUSK, in the *N. Y. Med. Jour.*, says: It is always a good plan, therefore, at the time of laceration, to take a pair of vulsella forceps, and, as an assistant presses down the fundus of the uterus through the abdominal walls, you can draw the cervix down, and then with a needle and thread sew up the wound, as the tissue is now patulous and easy to work upon. In this way you can check the hemorrhage, and a suture makes the best hæmostatic we have.

[Much confidence as we have in Dr. Lusk, we must take exception to the above. Drawing down the uterus adds greatly to the danger of any operation and is often followed by permanent displacement of the pelvic organs, and such a procedure is not the best way of controlling hemorrhage.] A. J. C. S.

Calabar Bean.

One-fiftieth of a grain of the extract, repeated every half-hour for six or eight doses, is an effectual remedy for the

flatulence and a sensation of palpitation or fluttering at the pit of the stomach, suffered by many women at the menopause. After the number of doses above mentioned have been taken, three hours should intervene before recommencing its use.

Vulvitis of Little Girls.

The affection described in the classical treatises under the name of "*Vulvitis of little girls*," is not a simple vulvitis, but is always a "*vulvo-vaginitis*." It arises either from some constitutional vice, due to bad hygienic surroundings or faulty nutrition, or from local irritation from uncleanness. The flow is purulent, thick, yellowish or greenish-yellow.

The treatment must be directed against the lymphatic or herpetic diathesis on the one hand, and against the local state on the other. 1. Daily baths to which are added about thirty-five ounces of common salt and a few ounces of starch. 2. To take daily before meals a teaspoonful of the following syrup: \mathcal{R} . Brom. sod., grs. xv; potass. bromide, grs. 45; syr. tolu, \mathfrak{z} v. M. And to drink mixed with wine, at meals, of a solution of bi-carbonate of soda of seventy-five grains to a litre of water. 3. Mild laxatives, as castor oil, manna, etc., weekly. 4. For local use, injections of the following: \mathcal{R} . Glycerine (neutral), \mathfrak{z} iv; alum and potass. sulphate, grs. 45; sydenh. laudanum, m. 30. M. Injections to be made with a small rubber syringe, with small point, and the mixture to be thrown up as high as possible into the vagina. A teaspoonful in half a glass of warm water for each injection—morning and evening. Leave a pledget of charpie, imbibed with this solution, between the lips of the vagina.—*Revue M. et Ch. des M. d. F.*—*Progr. M.*—*Cin. Med. News.*

First Coitus Attended by Extensive Laceration of the Walls of the Vagina, and Followed by Profuse Hæmorrhage.

Dr. MUNDE reports this instructive case in the *New York Med. Jour.* He was called to see a girl, twenty-two years of age, whom he found pallid and anæmic from the loss of blood. She had been married the night before, and but a single connection had taken place. It was not attended by severe pain nor by immediate hæmorrhage, but some hours afterward she observed bleeding from the vagina, and sent for a physician who gave ergot, but without benefit. He made no examination. Then another physician put ice into the vagina, but also without stopping the hæmorrhage. Dr. Munde examined the hymen for the source of the bleeding, but found that it came from a point higher up. Introducing a Sims' speculum, the vagina was seen to be ruptured on the right side for a distance of about two inches and a half, extending from one inch above the intestines up into the right fornix. The uterus was retroverted. He assumed that there was a disproportion between the male and female organ. The bleeding was checked by firm tamponade with cotton. Two years ago he had attended a case of profuse hæmorrhage from rupture of the hymen up into the vagina along the urethra during first coitus, in which tamponade also was required to check the bleeding.—*Med. & Surg. Reporter.*

Cervical Endometritis.

Boracic acid is highly recommended by Dr. W. H. DEWITT in the treatment of cervical endometritis (*Cinn. Lancet & Clinic*). He cites a case in which, after going through the entire list of remedies used in such cases, he deter-

mined to test the value of boracic acid. Moistening a camel's hair pencil and covering it with the powder, it was carried as high up as possible; at the same time the convexity of the neck was also covered with the acid, on account of excoriation. Four days later there was very decided improvement, and the acid was then applied by packing the cervix with it as firmly as admissible. The patient was directed to elevate the hips and remain in that position for two or three hours, in hopes that some of the acid would find its way to the parts above the cervix. In one week, another examination was made, when it was found that all inflammation had disappeared.—*Weekly Med. Record.*

The Technique of Massage.

Dr. BENSTER summarizes the method of practising massage, followed by the French, as follows: 1. *Effleurage*, gentle friction, consists in making long, gentle, centripetal strokes along the course of the veins and lymphatics with the oiled hand. The pressure is intermittently firm and gentle, so made as to produce a sort of passive peristalsis. 2. *Massage à friction*, the rubbing stroke. This is accomplished by making elliptical strokes perpendicularly to the long axis of the limb with the fingertips of one hand, while the fingers of the other hand pass from above downward, parallel to the axis of the extremity. A sub-division of this class is the *massage par ondulation*, as used by Laisné in lumbago. 3. *Pétrissage*, kneading, is made always in a direction from the periphery toward the centre, and in such a way that the morbid tissues are seized by the hand, raised up and kneaded. This is employed in œdema of the skin, infiltrations into the subcutaneous connective tissues, and on muscles which have lost their pliability

through infiltration, inflammation, or contractures. 4. *Tapotement* consists in a tapping or beating of the diseased parts by the finger-tips, the hollow hand, the side of the hand, the fist, the percussion hammer, or a little rubber ball fastened to a piece of whalebone. This is employed chiefly in neuralgia.—*Wiener Medicinische Wochenschrift.*

Non-Specific Vaginitis in Old Women.

A form of vaginitis, occurring in women advanced in years and free from any suspicion of sexual relationships, is described by Dr. DESPRÉS (*Centralblatt für Gynäkologie*). It is dependent upon an incomplete incontinence of urine. The muscular walls of the bladder being atonic the organ is never completely emptied, and the residual urine excites a vesical catarrh. This leads to incontinence, and during sleep, particularly when the patient lies on her back, the urine trickles down into the vagina. There its presence sets up an inflammatory process, the more readily as the urine itself in these cases always contains a large quantity of pathological products.—*Med. Record.*

Displacement of Uterus by Distended Bladder.

An instructive case is reported by Dr. J. LIONEL STRETTON in the *Brit. Med. Jour.* After parturition, the nurse accidentally discovered a tumor in the patient's right side. She was comfortable, pulse normal, no pain, and had passed urine. A positive opinion in reference to the nature of the tumor was difficult, and thinking it might be a distended bladder, a catheter was passed, when between seventy and eighty ounces of urine were drawn off. The tumor then subsided, and the woman made an uninterrupted recovery.—*Med. and Surg. Reporter.*

Intra-Pelvic Inflammation.

Dr. W. H. BYFORD, of Chicago, read a paper on this subject before the last meeting of the American Medical Association, which we find in the *Ass. Jour.*, and which concludes as follows :

1. The sometimes terrible effects of examinations or operations in the pelvis do not often, if ever, take place when there is not a perceptible predisposing inflammation.

2. The inflammation may be so slight as to be easily overlooked.

3. It may be an original condition ; the sequence of an acute attack long gone by, or it may be the product of some immediately previous examination or operation, the effects of which have not subsided.

4. To avoid the dangers of acute inflammation we should, in making a first examination for pelvic disease, conduct it in such a way as not to give the patient much pain, and when she complains of much suffering, desist at the sacrifice of completeness of diagnosis.

5. Complaints of much tenderness to the touch, or the use of instruments, especially in parous women, is sufficiently diagnostic of inflammation upon which to base treatment for that condition.

6. If, with such tenderness, a thorough examination or an operation is imperative, it should be done under profound anæsthesia. There is no question, in my mind, that much less danger of ill effects is incurred in making examinations or operations on susceptible subjects, under the free use of anæsthetics.

7. Examinations or operations should not be repeated until after the effects of the first have entirely passed off.

8. As chronic parametritis is a frequent complication of most of the morbid conditions of the uterus, it should

be always suspected and its diagnosis be carefully considered in all cases of metritis.

9. When chronic parametritis is present, it should be the chief, if not the exclusive object of treatment, until removed.

10. It is not safe to use the sound, sponge-treatment, or intra-uterine stem, when there is perimetric inflammation.

11. It is especially dangerous to replace a displaced uterus, when it is bound down by inflammatory adhesions, by any means which will overcome its fixedness by force.

12. The use of pessaries or supports of any kind, which find their lodgment in the pelvis, is generally followed by disastrous consequences when there is even slight primitive inflammation.

13. All local treatment of the uterus must be conducted with the greatest care in all cases where this complication is present.—*Ibid.*

The Warm Bath as an Aid to Physical Examination of the Abdomen.

In cases in which an obstacle to palpation of the abdomen is offered by the hard and tense condition of its parietes and by the contractions caused by the contact of the hand, Dr. MAI places the patient in a warm bath. In a few minutes the abdominal walls become relaxed, and the examination is conducted with ease.—*Rivista Clinica.*

DISEASES OF CHILDREN.

Palatable Drugs for Children.

Dr. FREDERICK CHURCHILL (*British Medical Journal*): We owe it, probably, much to the persistency with which practitioners of the sterner sort have impressed their rhubarb and black

draughts upon rebellious children, in defiance of the protestations of nurses and mothers, that "the tasteless globule" has found such favor with the weaker sex. I could tell of several cases where the children have been entrusted to the care of a homœopath, while the parents luxuriate under the usual heroic treatment of the orthodox practitioner. We must not forget to swim with the tide.

To attempt to invade the sanctum of a nursery where the lady-paramount is cajoled into the idea that "nurse is a treasure," and prefers rather to foster the notion than to care to have her eyes opened to the actual state of reigning ignorance, requires all the practical art of the medical man gradually to overcome and remedy.

Undoubtedly the ailments under which children for the most part suffer, belong to the preventable class. They are due sometimes to overfeeding; very often to neglect, especially of the calls of nature; and very much to general bad management. With this view, it may be well to presume that the best and most approved mode of treatment for habitual torpidity of the bowels is not medicine, but an enema of soap and water, with occasionally a little castor or olive oil added to the injection. If this do not succeed, and the child's appetite begins to fail, it is an indication for administering medicine by the mouth.

Fortunately, the art of the apothecary comes in to our aid, and we are now enabled to give the most nauseous of drugs—castor oil—absolutely free from taste or smell, while it retains the aperient properties of ordinary castor oil. Messrs. Allen & Hanburys themselves advise that it should be shaken up with three or four times its bulk of hot milk. The viscosity of the oil is thus avoided, and the emulsion pro-

duced is scarcely distinguishable from warm rich milk.

If it be desirable to administer an aperient that will act more directly on the liver, and to avoid the unpleasant effects which often arise after taking "oil," the compound rhubarb pill will be found a serviceable aperient. Of course, some new method for its administration will be desired, which I shall now detail. Either an ordinary five-grain pill may be cut up, and a portion of it broken in small pieces may be buried in a chocolate-cream, which the youngest child will take with avidity; or for children of, say five years and upwards, I have given one-half and one-fourth of a grain of this pill, thinly coated. Half-a-dozen or so may be taken, like "hundreds and thousands," and washed down with milk and water.

The medicated fruit lozenges are very useful, *e. g.*, tamar indien and laxora lozenges. Podophyllin is probably one of the active ingredients in these lozenges. Only a small portion of a lozenge must be given to a child. The objection found with these is that they sometimes "gripe" the little patient. Next to these, perhaps, in efficiency and palatability is the compound liquorice powder, containing senna powder. About a teaspoonful stirred up with warm milk may be taken at bedtime, and a little chloric ether added (about ten to twenty drops). Very few children will object to take fluid magnesia or the calcined magnesia, especially if flavored with the syrup of mulberry or orange.

I have succeeded in masking the taste of many powders by the addition of powdered "rose" lozenges. I very seldom prescribe Gregory's powder, on account of its nauseous character and bulk. I prefer to combine the rhubarb with bicarbonate of soda, about five grains of each. This makes a much

more miscible and manageable powder. Given in jam, honey or golden syrup, the taste is altogether covered.

Children will sometimes take the "baume de vie," or decoction of aloes, without objecting much. A little of this rubbed into the stomach of infants will suffice sometimes to procure an action of the bowels. The extract of liquorice may be added to the decoction until the bitter taste is sufficiently masked. Children have not really such an aversion to it, for I have known them to lick off the aloes from their fingers when put on to prevent them from sucking them. Powdered aloes, about half a teaspoonful, may be given, mixed with brown sugar. The electuary of senna is taken without difficulty by some children, also the syrup of senna and the infusion with prunes. The effervescing purgative lemonade is a very agreeable drink, as also half a seidlitz powder flavored with lemon juice.

Turning now to febrifuge mixtures, there is not much need of flavoring to mask the flavor of these. Sweet nitre, acetate of ammonia, spirits of chloroform, are all pleasant drugs to take. The nitrate and chlorate of potash are rather saltish, but the sal prunelle and Wyeth's compressed tablets will be taken by the bigger children without much protest. The syrups of orange, lemon and mulberry, will come in as agreeable and cooling adjuncts. Cough-mixtures can generally be made very pleasant by the addition of syrup of squills, of tolu, etc.

As regards tonics, some considerable skill will be necessary efficiently to cover the bitter flavor. Children will take the saccharated carbonate of iron very well, and also steel wine; but if we attempt to give the bitter infusions there is sure to be rebellion in the nursery. Quinine—one of the most valuable med-

icines for children—can be given without difficulty, either in the form of pill or, which I prefer, dissolved in syrup of orange, without the addition of any water. This effectually covers the flavor. Quinine wine is useful for the elder children.

Chemical food is, of course, taken with relish, and if recently made is a serviceable tonic; but the phosphates, from their insolubility, throw down very much. The compound solution of the hypophosphites, in ten-minim doses, and the hypophosphite wine, form a perfect substitute for Parish's food. Besides having iron, in a form which is easily absorbed, the hypophosphite of magnesia serves as a useful antacid and stomachic in this combination.

Hysterical Affections among Children.

FRANZ RIEGEL communicates five cases to the *Zeitschrift f. Klin. Medicine*, one of which may be taken as a representative case. B., twelve years, was formerly healthy; fell sick eight weeks before, with fever and pain in both knee joints. Every attempt to stretch the legs drew forth cries of pain, so that the patient did not move about for four weeks and had been on crutches. The legs were held in a flexed condition, so that only the tips of the toes touched the ground. No change in the knee joint. By distracting the attention, it was found that the knee could be flexed without remarkable pain. By a sudden irritation with a pencil from an induction coil along the back, the child jumped from the stool, ran to the window and remained cured.—*Weekly Medical Review*.

Irrigation of the Stomach in Infants.

For the last three years, irrigation of the stomach has been practised at the

foundling institute of Prague ; it was performed on 286 infants, the majority of whom were from two to eight weeks of age. It is recommended in all cases, in which decomposed and poorly congested milk has been vomited, showing that the stomach retains its contents much longer than it should under normal conditions.—*Arch. f. Kinderheilkunde*.—*St. L. Med. & Surg. Journal*.

Inflammation of Kidneys.

Cases of a peculiar inflammation of the kidneys, epidemic and primary in children, and absolutely independent of any acute exanthem, are reported by Dr. Ludwig Letzerich as occurring during the spring and summer of this year (*Med. News*). The number of cases was twenty-four, the same symptoms being presented in all, and they showed the same fungi in the urine. Three children died of acute uræmia. The fungi found in the urine were carried through four successive cultivations, and then inoculated on rabbits. The rabbits were killed after a short time, and the same fungi found on microscopical examination. The fungi were somewhat similar to the bacilli of typhus ; they were somewhat broader and larger, however, and showed no globular forms. They had a disposition to become elongated, and form thread-like bodies, in which spores, developed and in irregular masses, were seen lying, at various distances apart. During the spore formation, the thread-like bodies could be seen separating into rods of different sizes. In the interstitial tissue of the kidneys, were found large deposits of micrococci. The kidneys were markedly hyperæmic, and the stellate points were of a dark red color, with black diagonal lines running through them. There were numbers of wandering cells

in the interstitial tissue.—*Weekly Med. Review*.

The Treatment of Measles.

Dr. D. MACLEAN, of Glasgow, in the *Lancet*, calls attention to a method of treating measles, which has been found, in his hands, to meet with what he calls universal success.

As this disease is considered one of the zymotic class, two principal things must be considered in its treatment : (1.) The management of the ferment, or whatever it is ; and (2.) the management of the effects of this ferment upon the system. The most marked of these latter present themselves in the effects of the ailment upon the mucous membrane of the lungs, and it is from its action there we have the immediate cause of the ensuing death, or the prolonged ill-health afterwards. The line of action to follow is : (1.) To relieve the congestion of the mucous membrane, which is the immediate cause of danger ; and (2.) to destroy or reduce the violence of the disease itself. This, Dr. Maclean is in the habit of doing, he believes successfully, by giving (say to a child of two or three years of age) a teaspoonful, in water, of the following mixture, every three hours : ipecacuanha wine, half a drachm ; syrup of squills, half an ounce ; quinine, 2 grains ; acetate of ammonia solution, to two ounces. The quinine is increased according to age. It may be necessary to add to, or modify, the form in which this plan of treatment is carried out, as when the irritation or cough is persistently great, then the addition of a little tincture of hyoscyamus is all that is necessary. If the stomach is irritable, it may be necessary to omit the quinine from the mixture. But as it is essential that it be introduced into the system for the destruction of the ferment, it can be administered sep-

arately by giving it in powder, mixed with saccharated carbonate of iron, which diminishes the irritant action of the quinine that takes place when the drug is given alone.

This form of treatment for measles he regards good in all types of the disease, whether the attack be mild or severe, and more especially valuable when we have that dangerous form in which the eruption is of a deep-purplish color, a form which is generally recognized as being the most fatal.—*Med. Med. Jour.*

The Common Diseases of Children.

Dr. R. L. MOORE read a paper on this subject before the last meeting of the American Medical Association (*Ass. Jour.*), which concludes as follows :

One of the watchwords in treating children is "elimination." Don't lock up the secretions. Give Nature, that grand old mother, a chance. Very rarely should opium, or any of its preparations or derivatives be used in the treatment of children. He who abides the nearest to this rule will always have the best success in treating them. Look after them closely. Stand by the small and frequently-repeated doses of tasteless medicines. Never forget that a sick child is always dangerously sick.

Wet Pack in Scarlet Fever.

Dr. A. F. RUNDALL, in *Medical Call*, speaks highly of this remedy. He says he always puts the patient in a wet pack, if called before the rash is thoroughly out, and before desquamation begins to take place, using water at the temperature of 67° to 70°. The patient is left in the pack from half to three-quarters of an hour, and is given all the cold water he wants to drink. The pack may be repeated to reduce fever. He finds

this treatment to act nicely in allaying the fever and bringing out the rash.—*Ibid.*

Local Application of Vaseline in Scarlet Fever.

Dr. J. B. JOHNSON (*Med. and Surg. Jour.*): I have found nothing so efficient in relieving the burning and itching sensations of the eruption of scarlet fever as the inunction of the whole body with vaseline. The vaseline is simply used by being well rubbed upon the surface of the body with the hand once or twice a day, and continued as long as the patient complains of burning and itching of the skin. These inunctions soothe and calm the patient in an astonishing manner, and are rarely required beyond two or three days. On the appearance of the stage of desquamation, I have the whole body well sponged once a day for a week with the following wash: *R.* Hyposulphite of soda, 3 viij; carbolic acid, No. 1, 3 j; glycerine, 3 jss; aqua, 5 viij. *M. S.*—Shake well, and sponge the body well, after the wash has been made tepid by placing the vial containing it in a pan of hot water.

This sponging should be conducted in a room of equal temperature; and immediately after each sponging the body should be well dried with a soft towel; and the patient protected against taking cold. This process should be continued for at least a week; and it has not only the advantage of healing the new skin, but that of disinfecting the particles of desquamated skin, and thereby lessens the infectious character of the period of desquamation

A Method Proposed to Secure Children Against Attacks of Diphtheria.

Dr. F. PEYRE PORCHER: Acting upon the theory that diphtheria (whether

or not it may depend upon a specific germ) is at its inceptive stage local, and has its seat in the fauces, which, if impressed or modified by suitable agents, will not offer a nidus for its reception, Professor Porcher proposes as a prophylactic the following: ℞. Tinct. ferri chlorid., 2 to 3 drams; potassii chloratis, 2 to 3 drams; quiniæ sulph., 15 to 20 grains; sodii hyposulphitis, 1 to 2 drams; alcoholis, 1 ounce; aquæ, 6 ounces. M. Sig.—A teaspoonful to a dessertspoonful three times a day in water. To be used by those who are exposed to the disease.

The author has used this formula for a number of years as a prophylactic for diphtheria in many families whose members had been exposed to the disease, and states that he has never known a case of diphtheria to occur where it was so employed.

Evidence is not wanting from other sources of the value of the medicines above named, especially the muriated tincture of iron and potassium chlorate, both as a prophylactic and cure for diphtheria.

The same formula is said to be serviceable in scarlet fever. And with two or three drams of acid tartrate of potassium in lieu of the hyposulphite of sodium, it has proved of great value in the treatment of erysipelas, ulcerative sore throat, cellulitis, and diseases of the lymphatic system.—*Louisville Med. News.*

OBSTETRICS.

Treatment of Puerperal Fever.

Dr. T. MORE MADDEN (*British Med. Jour.*): Whatever other treatment may be required, the employment twice a day of warm antiseptic intra-uterine and vaginal injections, or still preferably of

similar irrigations should never be omitted. The use of these to wash out thoroughly all septic matter from the cavity of the uterus is self-evident. At the same time, it is necessary to impress on the nurse the necessity of using the ordinary vaginal syringe with far more caution than is generally observed by ordinary midwives, so as to avoid the risk of injecting air into the open uterine sinuses, or forcing the fluid through the patulous Fallopian tubes into the peritoneal cavity. The precise antiseptic solution used in this way matters comparatively little so that it accomplishes its object of washing away all vitiated exudations or septic matter, and bringing about a healthier condition of the uterine walls and vessels.

The author had used, with almost equal advantage, weak solutions of carbolic acid, permanganate of potash, turpentine, tincture of iodine, sanitas and terebene; and when none of these were at hand, had found an excellent substitute in simple chamomile tea. Care should be taken not to employ overstrong antiseptic intra-uterine injections.

[It seems to us better practice to withhold the intra-uterine douche till vaginal irrigation fails to control the high temperature. If the pyrexia does not yield within a few hours to the vaginal douche properly used, it is safe to assume that the uterine cavity is the source of infection. Its frequent and thorough cleansing is then imperative. But the cavity of the puerperal uterus should not be too hastily invaded. If the vaginal douche is capable of harm, intra-uterine injections are doubly so.] J.

Hysterectomy in Pregnancy.

Prof. KARL BRAUN VON FERNWALD read a paper on this subject at the meeting of the k. k. Gesellsch. der Aerzte, in Wien. He reported five cases in which he had performed Cæsarean section by Porro's method, on account of the absolute indications of very narrow rachitic and osteomalacic pelves. At present the women are all doing well. One, a case of severe osteomalacia, was so much improved as to be able to assist in the ward-work. His statistics of the Cæsarean section with hysterectomy and castration, during six years, are twelve cases: Recovered, seven; partially favorable consequences in one case; and bad results in four cases. Of the twelve children, eleven are living. The general mortality as regards the women, is 33.3 per cent.

The extra-peritoneal method of treating the stump was employed in eleven cases, with bad results in three cases; mortality, 27.27 per cent. The three deaths were due to peritonitis within from two to four days. The stump was dropped in one case, with a fatal result.

Prof. Braun recommended the Porro operation with the extra-peritoneal treatment of the stump, and altogether rejects dropping the stump in these cases, as well as the return to the old operation with the new uterus suture of Sanger and Leopold. He finally recommended the following modifications for Cæsarean section with amputation of the uterus, castration, extra-peritoneal treatment of the stump: 1. Early operation at the end of pregnancy, before the beginning of labor, as the most proper time. 2. Antiseptic prophylaxis with 5 per cent. carbolic acid water before, and thymol water (1 to 1000) during the operation; anæsthesia with the alcohol-chloroform-ether mixture. 3.

After the abdominal incision has been made, the uterus should be drawn out, and an elastic loop thrown around the cervix, before the incision into the uterus is made. 4. A high elastic permanent ligature just above the cervix, and over that a strong Billroth's écraseur chain, before the amputation of the uterus. Cauterization of the stump. 5. Closure of the abdominal wound with a metallic-plate and silver-wire suture, and with carbolized catgut. Fixing of the stump by means of a diagonally placed lance needle, and bringing together of the peritoneal walls. 6. Cleaning and dusting of the wound with iodoform and the use of the Lister iodoform-gauze and wadding dressing.—*Wien. Med.-Presse.*

Strychnia in Uterine Inertia.

Dr. EMILE DEGHILAGE recently used sulphate of strychnia in a case of uterine inertia (*Med. News*), in which all the usual remedies, friction, irritation of the cervix, injections, ergot, baths, etc., had failed, twenty-five minutes being sufficient to complete the labor, without any untoward circumstances. The pains of labor seemed to be diminished. The motor action of the drug on the muscular tissue of the uterus was very evident. The method of using it is very simple. Every ten minutes a granule containing one one-hundred-and-thirtieth of a grain of sulphate of strychnia is given. As the head descends, the interval between the doses is increased. It should not be given until the cervix is dilated. It would seem that this medication is especially indicated in cases of uterine inertia, and the author claims that it is preferable to forceps-delivery in these cases, as not being liable to be followed by hemorrhage. Deghilage has had several cases in which the results were as satisfactory as in the one reported.—*Weekly Med. Rev.*

Manipulation as a Means of Diagnosis in Obstetrics.

Dr. MONTGOMERY concludes an article in the *Med. and Surg. Reporter* on the value of external examination and manipulation as a means of diagnosis in obstetrics, as follows: Since the discovery of the pulsations and their varying frequency, it was seen that the greater rapidity was invariably associated with female children, and the contrary with male. Upon this, Frankenfeld proclaimed the theory, in 1859, that the sex of the fœtus in utero could be foretold as soon as the pulsations were distinctly countable. In fifty cases, he predicted the sex correctly in all; twenty-two being boys and twenty-eight girls. The average pulsation for the boys was 124; for the girls, 144. It has been found later, however, that the size of the child has much to do with the frequency of the pulse. My observations in the Philadelphia Hospital lead me to place great reliance upon the table formulated by Dr. Wilson, of Louisville, which is as follows: From 110 to 125, almost certainly male; from 125 to 130, probably male; from 130 to 134, doubtful—chances in favor of a male; from 134 to 138, doubtful—chances in favor of a female; from 138 to 143, probably female; from 143 to 170, almost certainly female.

Is Sulphate of Cinchonidine an Oxytotic?

Dr. W. O. HENRY (*St. Louis Med. and Surg. Journal*), has made some observations in his own practice to satisfy himself whether or not sulphate of cinchonidine has oxytotic properties. He believes this question to be one of no little practical importance to physicians who practice in "malarial" regions. Women from three to six months pregnant, when attacked by malaria, are very apt to present symptoms of abor-

tion. If it be desired to administer cinchonidine in such cases, it would be well to know definitely whether or not this agent would increase the tendency to abortion. Dr. Henry cites three illustrative cases and says: From these and other considerations I conclude as follows: 1. Cases of threatened abortion, of malarial origin, are controlled by cinchonidine, by reason of its specific powers. 2. When labor has begun, cinchonidine will increase the strength and duration of the pains, in consequence of its general tonic properties. 3. Cinchonidine will not, in any case, in ordinary doses, originate uterine contractions. 4. If these conclusions are true, as I believe them to be, cinchonidine is not, properly speaking, an oxytotic.

Measles.

Prof. HENOCK (*Ber. Klin. Wochenschrift, Phys. and Surg.*) reports the following: A four-year-old girl was sick with the measles. The eruption came on normally; but the fever did not abate. On the third day after the appearance of the eruption, the entire surface of the body was covered with blisters from the size of a hazel-nut to that of a dollar. The measles exanthem, which could be seen between these bullæ, were hemorrhagic. The whole face was greatly bloated, and the eyelids were so swollen that the eyes could not be opened. After the vesicular eruption ceased, the morning temperature fell to 37.8° C., but the evening temperature rose to 38.5°. The child was threatened with collapse, but revived. However, between the sixth and seventh days, croupous pneumonia set in, and, after eight days, terminated fatally. Similar complications have been reported by Klüpfel and Steiner. Henock pronounces this a complication of measles with acute pemphigus.—*Weekly Med. Review*.

DISEASES OF WOMEN.

Frequent and Painful Urination.

Prof. ALEXANDER J. C. SKENE,
Clin. Lecture (*Med. News*):

Gentlemen: To-day I desire to call your attention to frequent and painful urination arising from certain disturbances and anatomical lesions of the sexual organs.

Case 1.—Our first patient is thirty years of age, and has now been married eight months. Her health has always been fairly good until two months ago, when she began to suffer from frequent and painful urination. These annoying symptoms have continued ever since, and have also increased in severity. She states that in the morning and during the forenoon she is comparatively comfortable, and can retain her urine a reasonable length of time; but towards the afternoon the desire to urinate is frequent and urgent, and she has much pain in evacuating the bladder. These symptoms continue until night, and during the early part of the night she is compelled to rise several times and relieve her bladder; but after she has once fallen asleep she remains quiet until awaking in the morning at her usual time for rising.

Now the fact that she is able while asleep, to retain her urine until the bladder is distended to an average capacity, is an indication that the trouble does not involve the entire bladder, but that it is limited to the urethra, and, perhaps, the neck of the bladder. If she had a general cystitis the probabilities are that she would not be able to hold even an average quantity of water in the bladder at any time. We cannot, however, be sure as to the extent to which the bladder is involved without

an examination of the urine, but it is fair to suppose, judging from her symptoms, that the trouble is limited to the urethra, and probably the neck of the bladder to a slight extent. It is a curious fact in her history that during the latter part of the night and during the forenoon she is comparatively comfortable, but that her symptoms become aggravated in the afternoon, and continue during the early part of the night. This may be due to one of two causes.

First.—It may be due to the fact that the irritation subsides after lying in bed for a time, and does not return until she has been about for several hours during the early part of the day. The fact of her being upon her feet and maintaining the erect position, naturally brings more pressure to bear upon the neck of the bladder, and would thus aggravate an already existing irritation, and give rise to frequent urination, which continues until she again seeks relief by resuming a recumbent position in bed for a time. This certainly is one of the causes for this frequent urination in the later part of the day.

Secondly.—There is a cause which gives rise to the same peculiarity of clinical history, and that is *malarial poisoning*. A patient suffering from malaria quite frequently has irritability of the bladder indicated by frequent and painful urination, these symptoms being always most marked in the afternoon and evening. In this case, however, there is no indication of malarial trouble; so that the peculiarity of her history is no doubt due to the erect position maintained during the early part of the day.

Regarding the primary cause of her trouble, that is not quite so clear; there is no history of gonorrheal inflammation which could have affected the urethra or bladder, as it sometimes

does; neither has she any uterine or pelvic disease which would directly or indirectly affect her bladder. It is barely possible that it arises from the change in her social relations; having married late in life—some eight months ago—it is just possible that her family relations may have produced an irritation of the urethra and base of the bladder which, when once established, is very liable to persist if not relieved by treatment. Having an opportunity of examining this patient's urethra and the neck of the bladder, the probability is that we shall find a hyperæmic condition and perhaps some tendency to ulceration of these parts, but of that we cannot speak positively, as the examination has not yet been made, nor shall we trouble her with such examination until we see if we can relieve her by treatment.

In the treatment of this case we will render the urine as bland and non-irritating as possible, by permitting her to drink freely of the alkaline mineral waters—Vichy for instance—and in case she cannot procure that, we will order the acetate of potash. At the same time I will give her a favorite prescription in these cases: *R. Fl. ex. buchu, ʒij; tinct. conii., ʒj. Sig. ʒj half an hour before meals.*

If this fail to give her relief, we will then employ injections of sulphate of zinc, half a grain to the ounce of water, with the addition of a drachm of the fluid extract of *hydrastis canadensis*. In using this local application, we will employ a syringe with rather a large nozzle, which is to be introduced just within the meatus, then slowly and carefully inject the mixture so as to force it along the urethra into the bladder; being careful to have the bladder emptied previously. By adopting this plan we are sure of bringing the remedy

in contact with the entire mucous membrane of the urethra. We will also request her to abstain from coition, as that may be the cause of her trouble.

Case 2.—I have here a very interesting case brought to me by Dr. Stewart. This lady is forty-five years of age, unmarried. She gives us the following history: Up to six weeks ago she menstruated regularly every four weeks; since four weeks ago she has menstruated three times, she is therefore suffering from menorrhagia. She has great pain in the back and suprapubic region, with frequent and painful urination; altogether, suffering extremely, she says. I am now making but very little pressure upon the abdomen, and yet she complains very much. Upon examination I find an extremely interesting pathological condition here. Now bear in mind the prominent symptoms; there are intense backache and pain in the suprapubic region with an abnormal condition of the menstruation and a frequent desire to urinate. Dr. Stewart, in carefully examining the condition of the sexual organs discovered conditions which did not altogether coincide with her history as given by herself. He found the uterus large and well developed, with an os externum which looked as if it had seen service; the same also of the perineum. Upon being questioned very closely, or, as they say in law practice, "cross-examined," she admitted that she had had a child five years ago, and had been also operated on for amenorrhœa.

This gives us a clue as to the cause of the present condition of things which we have here. We find the uterus is large and the fundus is pointing towards the upper part of the symphysis pubis, the os looking towards the hollow of the sacrum, the body of the uterus is therefore pressing upon the blad-

der and crowding it downward—a condition which is sufficient to account for this frequent urination. The uterus is anteverted, and the prominent symptom is the functional disturbance of the bladder, due, no doubt to the displacement. I here show you a specimen of her urine. We often have symptoms of cystitis without cystitis being established. In this case we have vesical tenesmus because of the pressure of the fundus uteri. A normal bladder will tolerate pressure for a time, but after a while it will incite this frequent urination; it is therefore a question whether or not we have cystitis here. You will observe in this urine that there is an abundant deposit of the phosphates; if this clear up upon the application of heat, and we find no products of inflammation under the microscope, we will simply say that this is a mechanical derangement of function.

There is, however, another unfortunate condition here, and that is, that while the uterus is anteverted, it remains there in spite of all our efforts to restore it. It is anteverted and fixed in this position because of a former peritonitis. If she has been subjected to an operation for the relief of amenorrhœa, she has been in the way of having pelvic cellulitis or peritonitis, or both, and the evidence is that she has had one or both.

We have here, then, an incurable anteversion; all that we can do is to relieve the symptoms; we cannot remove the cause of her pain, backache, and vesical tenesmus; we can only modify these while hoping that she will live long enough to pass the menopause and be relieved by the final involution of the uterus. The plan of treatment will be to try and relieve her general condition. This urine shows her nervous system to be below par; when we have this brick-

dust deposit, it is said to be a symptom that the waste of the tissues is in excess of the assimilation for their support. It is said of clergymen that the deposit of phosphates in the urine is greater upon Monday than any other day in the week, by reason of the using up of the nerve force on the preceding Sunday. It is possible that we may improve this woman's general health so that her system will be able to tolerate her local difficulty, and thus bear her suffering much better.

It is impossible to use a pessary in this case as the uterus is fixed; part of her vesical irritation may be due to the fact that her old peritonitis involved the peritoneum covering the bladder, so that now it is impossible for that organ fully to distend. This peritonitis has probably extended in front of the broad ligaments forming adhesions, and thus holds the bladder in a splint so that it cannot extend; this may be another cause of her frequent urination. So that we have here two factors; the displaced uterus, and the thickening of the peritoneum upon the walls of the bladder which prevent its distension. We can do little but apply the douche and paint the vaginal roof with iodine; we can also introduce a belladonna suppository if advisable. This, however, as I have told you, can only be palliative.

This case is an exceedingly important one, as those who are most prone to this condition are those who abuse the generative functions.

There is one thing more here, which however hardly comes under my Chair. We find above the umbilicus a marked pulsation which may be an aneurism of the aorta, and which might possibly account for some of the abdominal pains.

Case 3.—Our next case is also one of incontinence of urine; the cause, however, of this condition in this patient is

entirely different from that of the preceding ones, and therefore must not be arranged under the same head. The patient, however, comes to us suffering from this incontinence, and I now present her to you as illustrating another cause of this difficulty. This little girl is twelve years of age. When she was three years old she had an attack of scarlet fever, and has never been well since; she has not accomplished much in the way of growth or development; she looks somewhat anæmic. During the night she has to get up six or seven times to pass her water, and, unless exceedingly tired, the desire always awakens her. During the day the passing of water is equally, or more frequent; for this reason she has been unable to attend school. This is very interesting, as it illustrates a class of cases which you will meet quite frequently. When urinating there is always pain, and she informs me that, if she attempts to restrain herself, it increases the pain; but immediately upon evacuating the bladder there is complete relief for a time. For the last nine years this has been going on. It is, however, a rare thing as a rule in this difficulty for the patient to awaken at night, the urine being generally passed in bed. This is a most miserable condition for a child to be in, being obliged to get up to urinate many times every night, or else to sleep in a bed saturated with urine.

Acute cystitis often follows the eruptive fevers, and sometimes in these cases it becomes chronic, as in this case, so that we should always be on our guard in the eruptive fevers and see to it if there is any cystitis following, otherwise the result will be the same as in this case. Now, whether the child has general cystitis or an inflammation of the neck of the bladder with urethritis remains to be seen. The way to make

the diagnosis is repeatedly to examine the urine, selecting the last drachm or two which passed, and if it contains pus and epithelium we may be tolerably sure that there is general cystitis. The order of the development of the pathological conditions in this case is as follows: first, scarlet fever, which gave rise to acute cystitis, or urethritis, which in place of ending in recovery, ran into the chronic or continuing variety.

Normal Liquid Ergot and Jamaica Dogwood in a Case of Fibroid of the Uterus.

DR. FRANK A. RAMSEY (*Therap. Gazette.*)

I was called upon two years ago by Mrs. Delia Johnson, colored, æt 35, married. Patient had never been pregnant; menstruated regularly in every particular, except that there was more pain than is ordinary; health generally good. She had been compelled to refrain from all exertion for six months because of an abdominal tumor, first discovered a year and a half before, that had progressively increased, causing corresponding inaptitude for physical exertion and attention to household duties. She slept but little and was despondent. The tumor, on examination, extended above the navel, and her abdomen, when she was in any position, had the appearance of a woman in the full term of pregnancy. It was decided that the tumor was a uterine fibroid. The uterus proper was considerably enlarged in neck and body. She was directed to take thirty drops of Jamaica dogwood at intervals of eight and six hours for relief of pain and discomfort, and a syringefull of normal liquid ergot was injected at a point on the surface over the tumor. The use of the hypodermic syringe was repeated every forty-eight hours for ten days; the

needle was always introduced perpendicularly and to the full extent of its length, the tissues of the abdominal walls being embraced between the thumb and fingers of the left hand. After five administrations the instrument was irregularly employed two and three times a week for a month, and subsequently for three months, once each week.

The dogwood was taken every day, once or twice, she having discerned the impression it made on her, and at her own instance made the dose larger and smaller, according to the length or shortness of intervals or frequency of repeating the dose of the medicine. This course was daily followed until she left to engage as laundress at Tate's Spring's, after seven months of this treatment. Treatment was suspended from the last week of May until the second week in November, last year. Then irregularly followed, injections being given once and twice a month for a few months, when it was again stopped. The Jamaica dogwood, at her own option, was taken perhaps once a week—sometimes more frequently, and occasionally not so often. This use of Jamaica dogwood has caused none of the thirst of an inebriate, nor the miseries of an opiate slave, nor the habitual resort to an agent to alter the sensations experienced by one in normal health.

It is notable that from the day the treatment of the woman began, there was perceptible positive release from the incubus of inability every successive day, pressing more and more upon her to leave her bed and her house and begin again the discharge of active duties to which she had been accustomed. Upon these she entered within two months, gradually regaining physical general ability. For a while there was no decrease in the size of the tumor,

nor alteration in the appearance of the abdominal enlargement. Within two weeks there was, on palpation, perceptible increase in the hardness of the tumor, as felt through the tissues of the abdominal walls. In the course of several weeks more, the size of the tumor was discovered to have lessened. It afterward certainly decreased, until from apparently completely filling the abdominal cavity, it is now no larger than a thick-rind Florida orange. Pain at menstrual periods is almost absent, except on occasion from tangible cause, and then easily controlled by the dogwood. The enlargement of the womb has also abated.

I have used other preparations of ergot, and hypodermically and successfully, in treating fibroid tumors, but in no instance with as rapid lessening of the mass, as in this one, under the administration of normal liquid ergot and Jamaica dogwood.

The circumstances of the above case lead to the question does Jamaica dogwood make impression adverse to the formation and growth of fibroids; or, does it have an action favoring the retrocession of maturing or matured fibroids? Or, is it, under definite conditions of the organism, not well recognized as an efficient adjuvant to ergot in the treatment of fibroid tumors?

A Hypertrophied Right Lobe of the Liver Mistaken for a Fibroid Tumor of the Ovary.

Dr. JOHN L. ATLEE, of Lancaster, thus writes in the *Med. News*:

Miss A. E., a single lady, aged about thirty-nine years, who for many years has been a teacher in our public schools, consulted me four or five weeks ago, soon after the school vacation commenced, about a tumor which

was developing in the lower portion of the abdomen. She had always menstruated regularly, and, with the exception of slight dyspeptic symptoms had always enjoyed good health, and never missed a day from her school. Within the last three months, however, she found herself becoming more and more emaciated, and had an unusual feeling of debility. Her color was good; tall and well-formed, with always a good appetite and generally regular bowels, but occasionally had some diarrhœa, and some pain like colic, for which she required an anodyne.

Upon examination I found a hard tumor occupying the centre of the hypogastric region, extending as high as the umbilicus and to the iliac regions, especially the right. It was very hard, but slightly movable from side to side, and this movement did not influence the uterus. The brim of the pelvis on that side was occupied by the mass, although it did not descend into the pelvis. Her waist was of the normal size, with no bulging above the umbilicus. She was sensible that it was increasing rapidly, and wanted relief. I diagnosed fibroid tumor of the right ovary, and if she wanted to be relieved I would operate.

After the usual preliminary measures had been carried out, and the exhibition of the anæsthetic, I commenced the operation at eleven o'clock a. m., August 22, in the presence of Drs. Atlee, Jr., Ehler, Welchans, Roland, Rohrer, and William A. Atlee, Jr., and Mrs. Dr. Wilson and her student, by the usual incision in the median line, and exposed the peritoneum, which was dark and very vascular. Upon laying it open there was a small escape of ascitic fluid, and behind it was a large, chocolate-colored mass, very firm and slightly nodulated, which proved to be an

enormous right lobe of the liver. I passed my fingers up and felt the left lobe with its sharp edge, soft, and apparently healthy. Whether it was wearing a tight corset, or from some other cause, the morbid development was toward the pelvis, as above the umbilicus there was nothing to indicate the presence of a tumor. Here was a dilemma which brought the operation to an abrupt conclusion, and the only thing to be done was to close the wound very carefully and put the patient to bed. I think it is a case of encephaloma, not yet fully developed, in the lower lobe of the liver.

I have never, in all my diagnostic experience, been so completely deceived, and I hope your readers will profit by my mistake. It is often in that way we gain our knowledge.—*Med. & Surg. Reporter.*

Classification of the Porro Operations.

Dr. ROBERT P. HARRIS, of Philadelphia, states, in *The American Journal of the Medical Sciences*, that, from a careful examination of the literature of this subject, he finds that we have no less than nine forms of operation, some of them differing very materially from the original, all called by the name of "Porro," and classified together, although having very different rates of mortality. It is hardly necessary to claim that this is very unjust to the originator, and unfair to his operation. If the Porro method is to stand upon its merits, rated by its proportion of cures, we must in justice exclude from the record all the cases not strictly deserving of the title. As it would only complicate matters to make nine orders of cases, Dr. Harris proposes to combine them where this can be fairly done, and thus reduce the list to four classes.

1. True Porro operations; Porro-Müller

operations. 2. Puerperal utero-ovarian amputations, with the pedicle dropped in. 3. Premature ablations of the gravid uterus, the fœtus not being viable. 4. Prévôt's operation, miscalled "Porro." (Utero-ovarian amputation after laparotomy for rupture of the uterus.) Dr. Harris appends a tabular record of 140 cases, from which it appears that the Porro operation, carried out as originally designed, has saved $46\frac{14}{41}$ per cent. of the cases; the Porro-Müller method, modified, has saved $52\frac{16}{17}$ per cent.; and the combined, $48\frac{8}{29}$ per cent. of the women, and 90 out of 118 children.—*Med. Record.*

Exploratory Laparotomy Three Years after Battey's Operation.

Dr. DAWSON said that three years ago he related before the society a case in which severe ovarian and pelvic neuralgia was completely relieved by the removal of both ovaries, which were afterwards found to be diseased. The Fallopian tubes were allowed to remain. Relief continued for two years; the woman went about her work in the enjoyment of good health. A year ago, however, she began to suffer again from pelvic neuralgia. And during the last few months the pain had become continuous, was exceedingly severe, and was growing worse, so that the patient had become clamorous for an operation, even at the risk of her life. From the fact that the pain was localized in the neighborhood of the Fallopian tube on the right side, and because it was believed that thickening of the tube could be detected, he decided, after consulting with Dr. C. C. Lee and Dr. J. B. Hunter, to make an exploratory incision, and, if the suspicions proved well grounded, to remove the diseased tube; and for this purpose she was admitted

into the Woman's Hospital. Before proceeding with the operation a more careful examination was made while the patient was under the influence of ether, and it was not possible to recognize that there was enlargement of the tubes. He proceeded to make the exploratory incision through the scar of the wound made at the previous operation. The patient had had more or less peritonitis, and adhesions were found to be so extensive that it was almost impossible to recognize the tubes at all; but they were found to be in a condition of atrophy. Without further interference, the abdominal wound was closed, and the patient did well. He asked what the prospects of relief were in such a case. The pain was so severe that the patient had again had to resort to the use of opiates, which must in time undermine her health. Other treatment gave no relief.

Dr. Hanks asked whether the amount of chronic cellulitis and peritonitis from which the patient had suffered, and was still suffering, was not sufficient to account for her present pain.

Dr. Dawson remarked that the pain was so circumscribed, and pointed so unequivocally to the region of the tube as its seat, which was also exceedingly sensitive to pressure, that it was inferred that the origin of the trouble was in that organ.—*N. Y. Med. Journal.*

DISEASES OF CHILDREN.

Pædiatric Therapeutics and its Relation to General Therapeutics.

I have fully verified the happy results of Mr. SMITH in his experience in giving one-third ($\frac{1}{3}$) to one-half ($\frac{1}{2}$) minim of tincture aconite every 15 to 30 minutes to his adult patients in fever. 1

have often found that in children suffering with fever, hot skin and dry throat, restless, with feeble, frequent and thready pulse, the best prescription I can give my little patient is 3 to 5 minims of tincture rad. aconite put into four (4) ounces of water, and to a patient of 2 years old give of this mixture one teaspoonful every 15 minutes. Under this treatment my patient will soon begin to rest, the pulse becomes less frequent, soft and of better tone, perspiration will soon be manifest, the temperature will come down, more secretion of the mouth and throat is established, croupal symptoms will subside, tonsillitis, pharyngitis and bronchitis, if present, will be ameliorated. Aconite is capable and has produced such excellent results in the treatment of children that some are desirous of calling it the children's medicine, but experience proves that where it is appropriately used in proper doses, its effects are just as desirable when given to the adult. If an inflammation is actually attacking our little patient, and is manifested by a full, bounding pulse, this can be better controlled by the use of 2 or 3 drops of Norwood's tincture of veratrum viride either as a substitute for or in connection with the aconite in four ounces of water given similarly. If diarrhœa with fever exists, the use of the 3 drops of aconite with 3 to 6 drops of tincture ipecac in 4 ounces of water is given in teaspoonful doses every 30 minutes, the results will be very desirable and even surprising to those not accustomed to its use. The same is true in proportionate doses when used in the adult.

It controls nausea and vomiting when thus given in small doses.

Belladonna in small doses, as the professor suggests, gives us excellent results, especially with children, and is

also capable of extensive application. If given in small doses will give surprising results (perhaps, as a capillary constrictor) in case of local congestion. In pulmonary congestion, when combined with aconite or veratrum, if specially indicated by the full, bounding pulse, I have no doubt, if used in time, by far the majority of pneumonias and local inflammations can be aborted. If our little patient is dull and drowsy, face restless or expressionless, circulation feeble in the skin, as indicated by a livid color, the capillaries slowly filling after being emptied by pressure; or in the brain, as indicated by a dilated or immobile pupil; or in the bladder, as indicated by the passage of large quantities of limpid urine, or incontinence and involuntary discharge of urine—nothing have I ever found so reliable in moving these abnormal symptoms, with their causes, as small doses of belladonna frequently repeated. Dose for children two years old, for example, about one-eighth to one-fourth minim, repeated every one or two hours, as symptoms require; excellent also in the debilitating night sweats of the adult in proportionate doses. Doubtless the experiment of Brown-Sequard first led the profession to the use of belladonna in all congestions producing dilation of the capillaries of blood-vessels, as they thus proved its special influence was to contract the capillaries.

In this respect it is the opposite of gelsemium, whose special province seems to be to control irritation; thus to stop or lessen the determination of blood to a part, and thus preventing the congestion by removing the cause; but where the congestion is fully established, a partial paralysis, and thus dilation of the capillaries is produced, then belladonna becomes the appropriate remedy.

In eruptive fevers its influence is to bring the eruption to the surface by overcoming internal congestion, and thus equalizing the circulation by determining to the skin. I believe when we better understand the nature and influence of the deadly night-shade, its belladonna and atropine will occupy a still more important place in our materia medica, and especially in the prescription of the coming physician.

Nux vomica.—Some one has said that nux vomica is the tonic of children.

It is received kindly by the stomach, improves the appetite and digestion, as well as tones up the debilitated nervous system.

It thus proves itself to be the remedy in nausea and vomiting, as well as infantile colic and irritation of the brain and spinal cord when due to enfeeblement.

One or two drops of the tincture in four ounces of water, or five to fifteen to the adult, one teaspoonful given every twenty minutes will give us excellent satisfaction if our case is properly diagnosed. We like its effects in diarrhœa of children, where the abdomen is full and flaccid, and especially where the pain is similar to colic and located at the umbilicus. In cholera infantum it is one of the important remedies if there is atony of the bowels, with enfeebled innervation and circulation.

Ipecac.—Why does the medicine whose special province heretofore has been to produce nausea and vomiting now prove itself so efficient (as the professor reports) in obstinate cases of vomiting and diarrhœa, when given in small doses frequently repeated? In my mind the question arises, is not the kind physiological effect of ipecac always to relieve irritation of the mucous membranes, and its drug or poisonous effect the opposite?

To satisfy the skeptical mind, let the intelligent practitioner try it in cases of irritation of the stomach, bowels, or bronchial tubes, in small dose, such as tinct. ipecac two to ten drops, according to the age of the child, in four ounces of water, and given one teaspoonful every fifteen to fifty minutes, and in adults in proportion, and when he obtains the certain relief from obstinate nausea, vomiting and diarrhœa, which he certainly will when due to irritation; diarrhœa of the simplest form to the severe cases of cholera infantum or dysentery, and when accompanied with fever, combined with similar doses of aconite; then let him answer in his own mind whether he is better pleased with the physiological or drug effect of the remedy. In this respect ipecac seems to be the converse of nux vomica, which proves so efficient in the same disease, when due to enfeeblement or atony instead of over-excitement or irritation.

Lobelia.—Let us hastily glance at this, another of the nauseant and emetic medicines, when given in full doses. Like its relative, ipecacuanha, its physiological is different from its drug effect. Given in cases of difficult or oppressed breathing, suffusion of the face, congestion, and especially in mucous rattling of the bronchial tubes, small doses of lobelia will improve innervation, give energy to the oppressed organs, and enable them to throw off the congestion and over-supply of mucous secretion; while in a little larger doses short of its emetic effect, it is an excellent antispasmodic in croup, asthma, and, in the hands of the obstetrician, proves a kind and valuable remedy in overcoming the rigidity of the *undilatable os uteri*, when given in one-drop doses, repeated every fifteen to twenty minutes.

Bryonia and Asclepias.—These two medicines, whose special province seems

to be to allay irritation of serous membranes, sometimes surprise us with their kindly and positive influence.

Well do I remember, some years ago, of attending on Mr. F., æt. 40 years, German descent, usually healthy, strong and robust, but then suffering with severe pleuro-pneumonia, and most intensely with the pleuritic stitch, which was so interfering with respiration as to be alarming at times; and after prescribing the usual sedatives, aconite and veratrum for fever, with full doses of Dover's powder and morphia to control the pain, and feeling confident of early relief, I repaired to the country. But some hours after my visit, instead of the expected relief, the pains in the chest became more severe and the interference with respiration more alarming, and another physician, my friend T. G. Matheny, was called to administer to him until my return. His prescription was tinct. bryonia and tinct. asclepias aa gtt., xx.; water $\frac{3}{4}$ iv. M. Sig. One teaspoonful every thirty minutes until pains were relieved, and every hour thereafter.

On my return and learning the above facts, and having confidence in the intelligence of the physician, and seeing the relief approaching, I continued the above prescription, not resuming the opiates, which had been set aside. Next morning I found my patient almost entirely free from pain, and fever very much abated, perspiration well established, and my patient very cheerful.

During the week following, the pains would occasionally return, but would again subside under the influence of the bryonia and asclepias. This repeated experience strengthened my resolution to study to know more of these remedies, and to more fully test them in other cases, which I did, usually with good satisfaction. After careful study and

experiment, I find, as I believe, the physiological effects of bryonia to be sedative to serous membranes especially, and thus a remedy in irritation of such membranes, whether of the chest as in pleuritis, or in the joints as in articular rheumatism, or abdomen as in peritonitis, and more especially if the pains are lancinating and accompanied by a tension of the muscles of the affected part, and excessive tenderness on pressure or motion of the parts, accompanied with restlessness, high fever, hot skin, and hard corded pulse; asclepias, as a type of diaphoretics, certainly quiets the nervous system, brings down the temperature, induces perspiration, relieves pain in serous membranes, and is thus a valuable remedy in such inflammations, and especially when accompanied with a hot, dry skin.

Baptisia.—Although I have used this remedy for many years in my treatment of children in septic fevers, believing it to be antiseptic and thus antifebrile, I confess, however, to many disappointments in its use, and a very imperfect knowledge of its real nature, and although we think we know more about it now than we did in former years, yet we know but very little, compared to what we believe is to be known of its therapeutic properties. I remember reading an article written by Prof. Scudder, of Cincinnati, in which he regarded it as an antizymotic, and its antiseptic and antifebrile properties depending on its power to antidote a peculiar ferment or poison in the blood causing the attendant fever, and this having peculiar manifestation, different from any other poison, producing a peculiar dusky color of the face, like one who had been exposed to severe cold. He recommended it in cases where the sepsis produces a deep red or violet color of the mucous membrane, with brown or black shade or tinge, and es-

pecially where there is foul breath, with a tendency to ulceration; and since using it in that class of cases, and in ulcerative sore mouth and throat, especially where there is any putrescence, both locally and internally, I am the better pleased with its effects, Dose to child: ℞. Tinct. baptisia, gtt. v to xx.; Aqua dist., §iv. M. S. One teaspoonful every one or two hours.

Santonine.

We usually think of santonine as a vermifuge only, in which it stands at the head of its class; but it has other important properties. I will not tarry now to discuss how or why it has a peculiar influence over the bladder, which renders it so efficient in overcoming, in some special cases, that severe burning or scalding sensation and tenesmus of the bladder, but only stop to say, in addition, that in some cases of retention of urine, a few small doses of santonine will prove to be the remedy *par excellence*.

Hyposulphite of Soda.—Last but not least, I wish to notice briefly hyposulphite of soda.

Standing as it does in the list of alkalies, and fulfilling their general indication, yet it seems to subserve a special purpose of its own. If we have acid fermentation in the stomach, indicated by acid eructations, coated tongue, or rather furred with a white or greyish-white or dirty color, accompanied, in children especially, with colic and green acrid discharges of the bowels, we naturally think of alkalies. If our patient is suffering with boils or abscesses of the cellular or muscular tissue, we say lime is the remedy, as it is the salt which preserves these tissues; or, if the coating of the tongue is a clean white, in the absence of any destruction of tissue, we

use bicarbonate of soda, believing that through its influence on the blood it influences nutrition as well as antidotes the acid; but when we have the dirty gray or brown color, tongue pallid and broad, accompanied with foul breath and fever, then the antizymotic influence of hyposulphite of soda will correct all, and lead our patient out into the sunlight of health and happiness.

I have thus briefly dwelt upon some of these remedies, and referred to my own experience, with that of others, and thus challenge the attention of this Section for the purpose of showing, as practically as I possibly can, the true relation existing in the treatment of children and adults, believing that if we candidly consider the true relation, we will reasonably conclude the way to treat children is to consider them human beings—offspring of their parents, subject to like infirmities and diseases, and to be similarly treated with proportionate doses, and this will simplify the study for the earnest student and enhance the sufficiency and proficiency of the therapist.

It is in the interest of the children also that I ask the intelligent attention of all concerned, and especially the college teacher, to the similarity of medication in all ages, and that to be suggested by the existing symptoms—not allowing the name given to the disease or name or age of our patient to drift us from our moorings, but ever aim to overcome the existing symptoms by their appropriate remedies. We should also encourage careful observation on the physiological action of medicines, as being of equal, if not of paramount importance to its toxic effects (for I believe the former is what we usually desire), and thus we will be the better enabled to apply our remedies more intelligently and directly to the relief of

the existing symptoms.—*Journal of American Medical Association.*

Absorption of Fat in Adults and Children in Fever and Apyrexia.

The *London Med. Record*, following a suggestion by Professor V. A. Manassein, Dr. V. E. Tchernoff (*St. Petersburg Inaugural Dissertation*, 1883,) investigated the assimilation of fat by adult subjects and children suffering from febrile diseases. The observations were conducted on twenty-two patients, nineteen of them being between 7 and 42 years of age, the remaining three under a year. Seven of the patients suffered from enteric fever, two from recurrent fever, four from typhus, two from erysipelas, one from malarial fever, two from croupous pneumonia, and one from varioloid. Of the infants, one had fever from vaccination, one suffered from scarlatina, and one from catarrhal pneumonia. The patients (those between 7 and 42 years of age) received milk, in which the proportion of fat had been previously ascertained, and bread; their feces, made from the beginning of an experiment, were collected and analyzed. The author sums up his results as follows:

1 A healthy subject assimilates about 90 to 94 or 95 per cent. of fat of the food given, provided it be present in a form suitable for the action of the bile and pancreatic juice.

2 A subject suffering from a febrile disease, as a rule, assimilates lesser quantities of fat than the same subject in a healthy state, the difference being on an average 7.2 per cent.

3 The single deviation from this rule is given in enteric fever. When suffering from the latter the patient absorbs more of fat than when he is convalescent, or quite well. This is especially true in regard to severe forms of typhoid.

According to the author, the fact of fat being better assimilated by typhoid patients finds its explanation in the presence of great numbers of leucocytes in the intestines in cases of enteric fever. As a recent work of Professor F. N. Zawarykin shows, leucocytes are "true absorbers and distributors of fat."

4 The quantity of absorbed fat, and the percentage proportion of fat in feces, are influenced by the quantity of fat in the food daily taken, by the individuality of the patient examined, by his general state at the time of examination, and, possibly, by the admixture of carbohydrates and albuminoid matters.

5 There exists no difference between adults and children in regard to all the propositions stated above.

6 Febrile patients, though their faculty of the absorption of fat is diminished, still assimilate fat in considerable quantities (from 80 to 90 per cent.). Therefore, any fears entertained against the administration of fat to febrile patients are groundless. Any avoidance of fat in febrile diet would be unjustified: fat is necessary for the diseased as it is for the healthy.—*Med. & Surg. Reporter.*

Catheterization of Infants.

We took occasion recently to note that the evidence of disease that would be revealed were the urine of infants and children more frequently examined would be greatly to our benefit in diagnosis. We now read in *Jahrbuch. f. Kinderheilk* that Hirschsprung recommends catheterization in order that we may produce the urine for such examination. He prefers a metallic catheter with a rather short end and the point solid to the eye. He scouts the idea of its use being dangerous, and strongly recommends it as a powerful diagnostic adjuvant.—*Ibid.*

Resuscitation of Still-born Children.

In the *Vracheb. Vedomosty*, 1883, No. 560, p. 3,856, Dr. H. I. RODZEWICZ, of Nijni-Novgorod, relates the case of a primipara, in which he delivered, by podal version, an infant without pulsation in the umbilical cord, or any other signs of life. Schultze's method having proved unsuccessful, the author took a large basin, filled it with hot water from the *samovar* (Russian tea-machine), added cold water until the temperature of about 35° R. had been reached, and placed the infant in the basin, leaving free only her head. In a minute or so the child began to breathe and lustily cry.—*Ibid.*

Albuminous and Purulent Urine in Children.

It is a good suggestion by Dr. SAMUEL J. GEES (*Brit. Med. Jour.*), that we should examine the urine of children and infants in all obscure cases of departure from health. This practice is very rarely resorted to, and yet it may serve to unravel many a mystery. It will serve to put us on the track of a latent disease should we find either albumen or pus in the urine.

Couvreuse.

An account of the *couvreuse*, a hot air bath introduced by TARNIER into the Maternity Hospital in Paris was published a few weeks ago in the *Review*. Kept in this hot air bath, the children are said to thrive remarkably. Professor Winckel, apparently with the same aim in view, has recently introduced the permanent hot water bath. The temperature is maintained between 37° and 39° centigrade, say as near as possible to a 100° F. The class of cases for which Prof. W. uses these baths are such as are born before term and such

as have respiratory difficulty. Of course, such device as is necessary to keep the head above the water is required. It is said: The infant put into the bath remains there perfectly tranquil. Although when exposed to the air he is restless and cries, as soon as he is placed in the hot bath he is calm, and comfort and well-being are established. Moreover, observations of temperature show that an elevation of bodily temperature takes place. Such an advantage for cases of before term-born infants is very manifest and does not require discussion. Often when the labor has been prolonged the infant at the moment of birth respires only with artificial aid. It is stated that in the new-born, where the lungs still preserve the characteristics of foetal life, the permanent warm bath gives excellent results. Through the influence of the warm bath the blood is drawn to the surface, the lungs are relieved of the excess of blood, and the air rushes in to supply its place, and slowly, in twelve hours or more, the respiration becomes completely normal. This latter application appears to us an excellent device, and far superior, both in simplicity and philosophy, to the devices usually employed.—*Weekly Med. Review.*

OBSTETRICS.**Case of Lacerated Perineum.**

Dr. T. M. LEES (*Planet*). The subject of this case, Mrs. C. Primipara, was confined September 10, 1879. The child presented in the first position. The labor was protracted, and immediately after the arrest of the head at its outlet I was desirous of delivery by the forceps; but to this the patient decidedly objected. After waiting some time, the external parts having become

much swollen and sodden, the forceps were applied, and she was delivered of a healthy male child. During the delivery of the head, notwithstanding that the perineum was supported and extraction done slowly and carefully, the perineum was felt giving way like a piece of sodden brown paper. After the removal of the placenta, which was done by introducing the hand into the uterus, a careful examination revealed a laceration extending one inch and a quarter up the rectum. The patient was kept quiet in bed on the usual diet. On the morning of the fourth day the bowels were freely moved by an injection and dose of castor oil, and the operation performed in the afternoon. The operation, very simple throughout, was done as follows: The patient being placed on a kitchen table (the only article of furniture suitable in the house), was put in the Lithotomy position. Dr. W. C. Hunter having administered chloroform until the patient was fully under its influence; her mother afterward gave it as required, he kindly assisting me. The laceration of the rectum was brought together by passing two silver sutures (one close to the rectal, the other close to the vaginal mucous membrane), which followed the laceration entirely around. These being tightened and securely twisted, brought the lacerated surfaces into close opposition. The perineum was now brought together by six thick silver sutures entered about one inch from the torn surface and brought out at a corresponding point on the opposite side. These in like manner being secured, and the parts found in good opposition, Richardson's Styptic Colloid was freely applied external and vaginal. The patient was afterward put to bed, and morphine given in sufficient quantity to keep the bowels locked up and remove nervous irritation. On the

tenth day the sutures were removed, when complete union was found. The bowels were gently moved in the evening by an injection and small dose of castor oil, and on the twelfth day she got out of bed. The points I wish to bring before my brethren for their consideration and investigation are the following:

1. What is the most desirable time for operating in such cases? If the operation had been performed immediately after delivery I am quite sure no union would have occurred, owing to the very free lochial discharge, and the bruised and œdematous condition of the tissues, which were really almost in a condition for sloughing instead of repair. If the operation had been delayed for several weeks, as many advise, the slow, troublesome process of paring the edges, etc., had to be performed. By selecting the fourth day I found that the lochial discharge was very scanty and not likely to interfere any way with union; that the œdema had entirely disappeared, and that the raw surfaces were slightly granular and favorable for repair.

2. By using Richardson's Styptic Colloid freely an artificial skin was formed over the wound, it was kept aseptic, admission of air or lochial discharge prevented, and as a consequence no pus was observed at any time during the progress of the case.

3. Owing to the feeling of restraint and irksomeness produced by having the thighs tied together, the bandage was removed and the patient told to keep her legs as close as possible without discomfort.

4. The mother, not caring to pass the catheter, and being unable myself to visit her two or three times daily to do so, she was instructed to get upon her hands and knees slowly, and evacuate the bladder in that position, which she

had no trouble in doing with ease and great comfort to herself.

5. The position in bed was semi-prone in order to allow the lochia to flow along the anterior wall of the vagina.

Treatment of Abortion.

Dr. A. T. CARSON thus concludes an article in the (*Canada Lancet*):

When called to a case of abortion, unless the case be one of great urgency, I make no vaginal examination whatever. I leave the uterine contents free from the slightest chance of contamination as long as possible. If the loss be free, I order a dose of ext. ergot and tr. ferri every half hour or hour. If the loss be long continued, it is astonishing how well the iron enables it to be borne. With regard to the use of ergot, I am perfectly aware of the objections which have been raised against it, but do not consider them of the slightest moment. We know very well its effect in cases of ordinary midwifery, and there are no grounds for supposing that it has different effects at different months of gestation. I have often used it when the head was on the perineum and have never had it complicate a case with any form of retained placenta. A well known lecturer on midwifery informed me that, having used ergot subcutaneously at the end of the second stage over 2,000 times, he has never been able to trace any placental difficulty to its use. Besides, I fancy that the hemostatic action of ergot is not sufficiently appreciated. We know that if used freely during the first stage of labor, the child's life may be endangered. Why? It used to be said, from the violence of the induced pains; but this statement is scarcely tenable, when we see children born alive after natural

labors quite as violent and as protracted. We are then driven to the belief that the child is in peril either from something toxic in the ergot itself, or else from interruption of the circulation in the placenta, caused either by the continuous contraction of the muscular tissue of the uterus mechanically compressing the blood vessels without intermission, or by the contraction of the arteries themselves. I have never seen a case where ergot was used to this extent, but as I have always understood that if born alive at all the child speedily revives; it seems that the argument in support of the toxic effect is weakened by that fact, inasmuch as the mere supply of air would not at once remove the toxic agent from the blood. Possibly both causes are at work, but undoubtedly the bulk of evidence seems to me to point to the danger arising from interruption of the placental circulation—the very thing which in abortion we wish to produce.

And now as to the practical results. Dr. Mundé's paper in the *Obstetrical Journal*, advocating the immediate clearance of the uterus by curette and forceps in every case, is founded on 57 cases, of which 30 were consultations. I have had in charge at least two or three times this number in the last twenty years. Some time ago, in reply to a correspondent, *The Field* (London) stated that 3,000 recorded consecutive games of whist were not enough on which to found a new rule of play. If this number be not sufficient to fix a new rule of whist, how many carefully observed cases of disease would be necessary to lay down a fixed rule of practice for the scarcely less complex phenomena of the human economy? certainly more than were seen by either Dr. Mundé or me. I simply give my experience, to be taken for what it is

worth towards that result. I have been called into cases in consultation in which we were glad to plug or get the uterus emptied by any means in our power. I have had one case of typhus fever who aborted the day she died of the fever. With this exception, in my own practice, I have not once had a case of septicæmia or a patient's life in apparent danger from any cause whatever, and have never required to remove a placenta or plug. The uterus invariably cleared itself in a few days at furthest, and the hemorrhage was restrained within reasonable limits. Much of this apparent difference in practice doubtless arises from the different races and classes with which we have had to deal. My experience is chiefly derived from dispensary work in a robust, rural, Celtic district in the north of Ireland, and must of necessity be quite another affair from work among the wealthy classes of New York. We cannot put furs on the Hottentot and order the Laplander to go naked; and in like manner we cannot make a fixed rule of practice to apply to every clime and nation. Besides, the more eminent a practitioner is, the more likely is he to be called to an unusually large percentage of bad cases, and as it is stated that one in every six or seven pregnancies ends in abortion, it is evident that many have no professional assistance, unless it be that of the dispensary doctor, as in Ireland, where his services are available properly, free of expense, to fully half the entire population of the island.

There is an old proverb, that "children should not play with edged tools." Any instrument in the uterus is an edged tool, and though our graduates are far from fools, yet it must be admitted they are little better than children in the use of uterine instru-

ments. It is one thing to have a man of Dr. Mundé's experience empty a uterus with a curette, and quite another to place that instrument in the hands of a student for the same purpose; and any one who will teach his class that they are at once to attack *every* case of abortion with finger, forceps, or curette, will incur a responsibility, which, I for one, would be sorry to undertake.

Sore Nipples.

Dr. FAVRE (St. Petersburg *Medicinische Wochenschrift*) is of opinion that there are two varieties of these, fissures and erosions, and believes that the latter are to a large extent due to tight-fitting dresses and pressure by corsets. He advises that the nipples be sprinkled with bismuth, dry, or that this be made into an ointment in the proportion of one of bismuth to two of vaseline. This procedure has often resulted in a cure within twenty-four hours.—*Gaillard's Med. Jour.*

Failure of Hot Water to Produce Contractions.

Failure of hot water to produce permanent contraction of uterus. Success with electricity. Dr. T. J. Kearney details his persistent efforts to effect permanent contraction of the uterus after labor by the injection of hot water, and the addition later of three ounces of the tincture of iodine. On the application of electricity, however, continuous uterine contractions were established. We regret to say that the doctor does not give us the exact mode of applying the electricity, and that he fails to inform us whether he used the galvanic or the faradic current. We suppose, however, he used the latter.—*St. L. Cour. of Med.*

DISEASES OF WOMEN.

The Sponge-Tent in its Practical Application.

Dr. MARCELL HARTWIG. (*Buffalo Medical and Surgical Journal*.)

All objections would lose much of their force, were the disinfection of the sponges thorough and reliable. In future, non-evaporating substances will have to be used, such as salicylic acid, five per cent.; iodoform, five per cent.; or bichloride of mercury, $\frac{1}{2}$ per cent.

According to recent investigations, that, namely, the internal surface of the uterus, is always teeming with bacilli, we should always apply, even though the tent is well disinfected, a reliable antisepticum to its surface, in order not to press *living* bacilli into the tissue of the uterus itself. For this purpose I recommend dipping the tent into a ten per cent. solution of carbolyzed glycerine and then to roll it in powdered iodoform. The combination offers the advantage that it does not soften the sponge; and as to the glycerine, it has been shown to possess a valuable property in that it produces a profuse, watery secretion from the uterine cavity, and that it thus manifests a depletory action. The iodoform has, on account of its slight solubility, the advantage of continuing antiseptic action for a greater length of time. Just on this account the sponge ought to be not only disinfected, but ought to contain a free disinfecting agent, ready for action. If the sponge is coated with wax or paraffine (gelatine, perhaps, is preferable) the coating, also, should contain an antisepticum. Sponges ought to be coated, because with a narrow uterine canal, such in which dilatation is so frequently necessary, the introduction is often not immediately possible, and

the sponge is spoiled before introduced unless it is coated. For this reason I generally begin with tupelo tents, since their introduction. They, too, should be disinfected, though they are not so liable to infect, and certainly never did in my hands.

Another method of introducing tents is a preliminary, limited dilatation with steel instruments. But for a complete dilatation they all are unfit, according to my conviction; and were they not, this proceeding itself would be altogether reprehensible, being too rude. I have seen a nervous lady faint with a shriek from a free and easy introduction of a sound, when the button passed the inner mouth of the womb. I convinced myself twice, on this same lady, *experimenti causa* to a certain extent, of this intense sensitiveness of the internal os, which is always peculiarly irritable.

After a thin tupelo has been laying in utero for six hours, we can generally succeed to introduce a little thicker sponge-tent. It is always advisable to wash the uterine cavity with a three per cent. solution of carbolic acid, before a new tent is introduced. If a very wide dilatation is necessary, several sponges must finally be introduced at the same time. As a rule, a sponge ought not to be left in the uterus more than twelve hours, and all instruments, and the vagina, should be thoroughly disinfected. It was at one time proposed to disinfect the uterus at the very outset by washing its cavity, but this is not always possible, because the fluid cannot safely escape, even by suction. Many grave accidents have thus happened. Reversely, to be able to apply medicines to the uterine cavity, previous dilatation is often necessary.

The employment of the sponge-tent in gynecology may be divided, with more or less propriety, into its use as

an explorative measure and into its use as a curative agent. As a means of curing, the tent is useful in destroying, by its continued pressure, the granular degeneration of the mucous membrane. It may be possible to cure flections occasionally by means of the tent alone, but I do not know of such a case, though the straightening, in combination with the change of nutrition, looks promising. For the latter purpose alone, we occasionally use the tent in the chronic infarctus, and with more or less success. To destroy granulations and the concomitant leucorrhœa once proved grandly efficient in my hands. A lady, who had inherited from her mother a dysmenorrhœa membranacea, and who suffered since her nuptials from a very profuse (perhaps Noeggerath's) leucorrhœa, commenced to flow considerably during her menses while the usual pains were still increasing. The leucorrhœa having persisted during four gestations, the everted mucus membrane of the os being highly reddened, pulpy and bleeding at the slightest touch, I supposed there were granulations on the inner surface, and proceeded with dilatation. Three tents were introduced into the uterus and allowed to remain twenty-four hours. The reflex and other phenomena were intense. Very often repeated vomiting and strong pains were only incompletely controlled by subcutaneous injections of morphia, but after removal of the last sponge the leucorrhœa of twenty years' standing was forever gone, and the menses became regular and painless. After three months some membranous pieces began, with some pain, to show again; but the leucorrhœa did not come again for years. Was my diagnosis of granulations correct or not? Who will deny it, or who could prove it beyond doubt?

In two other cases of dysmenorrhœa membranacea the effect was similar, but not as perfect; the leucorrhœa continued, to a certain extent, but I did not succeed, in one of these cases, to introduce a second tent to the fundus, and had to stop.

In regard to straightening a bent uterus with the tent, I would add that certainly few cases would be adapted for it. When adhesions fasten the womb or where one wall is atrophied at the inner mouth, the tent must of necessity fail. But in cases of retroflexions from softness of the uterine tissue *post partum*, a tent, and lying on the abdomen, may show results yet.

With chronic uterine infarctus I have used the sponge twice. In both cases there existed laceratio ossis externi and enlargement of the womb by one-half of an inch, but they differed, as the second case was a plethoric lady with excessive menses, while the first was more delicate and had rather scanty monthlies. The initial result was satisfactory in both cases. The leucorrhœa diminished in both, but in both nothing was finally achieved.

The second of the above-mentioned cases is not entirely cured yet, and perhaps never will be; but the interest of the case centres in a disagreeable change it assumed. The introduction of the first *bent* sponge was comparatively easy, though considerable antelexion existed; but the second *straight* sponge could not be entirely introduced, as in a case already mentioned, though I omitted to wash the uterine cavity purposely, in order not to give the uterus time to contract. Whether on this or any other account, and though I had used all the disinfecting precautions mentioned above, the fact is, that forty-eight hours after the first introduction a fever set in. For three days it fluctu-

ated between 101 and 103½, then it sank to 100, to 101 and continued, though the lady left the bed, and though she did not present any untoward symptoms beyond a little weakness and some of her old complaints, for three weeks. The closest examination did not reveal anything like para- or perimetritis, or the like. Where have we to place the cause of this fever? I cannot but think that somewhere the disinfecting precautions were at fault anyhow, but that the infection was so slight as to cause at least no perceptible parametritis, etc.

A very instructive case in regard to infection, in which to my great sorrow, no post-mortem examination could be obtained, was that of a robust woman whose sterility I tried to cure by slitting the portio vaginalis, using as a dressing to the wound per chloride of iron and cotton dipped in glycerine, as Sims recommended.

The treatment was carried on at my office. On the fifth day I took it for granted that the wound would be in a condition non-susceptible to septic poison, because it was granulating; and hence removed the tampon. Already, on the next day, she became feverish, but I was summoned one day later. I found her with considerable fever, disinfected the uterine cavity and wound; but it nevertheless took three weeks until the fever subsided altogether. Here likewise it was impossible to find a local inflammation. She had been up and about her duties again and seemed to be well and cured of her trouble, when once more a fever began to set in. By and by, a chronic (apparently cheesy) pneumonia was diagnosed in right lower lobe, which, at the end of about two years, caused her death. Her womb had not troubled her any, and at the beginning of her pneumonic symptoms I was thinking of embolism. May be

that she had inherited a taint from her father, whose history, however, is not known, or that her constitution was undermined by indulgence in strong drinks; still, nobody would have suspected phthisis in her, and I could not help thinking that in this instance there was something anyhow in the *post hoc ergo propter hoc*, the more so, because a similar state of things occurred again to me, the development, namely, of cheesy pneumonia shortly after I had dilated a cervix with metallic dilators. I once saw pyæmia with embolism in the lungs after abortion, resembling in some respects these cases, although, of course, *toto coelo*, different in its pathogenesis. This case recovered. I would remark, in passing, that among my cases in which I incised the portio, there was one which commenced with a fever from the same cause as the above mentioned fatal one. But being called at the very beginning, I immediately suppressed the fever by means of thorough disinfection.

Far oftener than for curative purposes, the tent is used as a means of diagnosis, and to enable us to operate in the inside of the uterus in non-pregnant and pregnant women, and after timely or untimely confinements. Here the tent often wins its best triumphs. Frequently we would be entirely unable to do anything really beneficial for our patients had we not the tent at our disposal. But the danger of infection should at all times be kept in mind. Do not use it when you can get at a diagnosis with simpler means, or where the disease is not of much importance; but if you do use it, do not omit any of the indicated precautions, whether they appear practical or theoretical. No thought can be more horrifying to the physician than to know positively that he has injured instead of done good, or where

with due care he could have saved. And just here an insignificant negligence can make you pay dearly. My first case, in Berlin in 1873, has taught me a severe lesson. A lady, in the climacteric period, called on me, having a protracted menstruation, which lasted two months uninterruptedly. Being desirous of finding the cause, other means having failed to detect it, I inserted one of these extremely rudely prepared tents then kept by our instrument dealers. They were, as far as my recollection goes, supplied with antiseptic precautions, but were without complete antiseptics. That the latter was incomplete was best proven by the effect. The lady became very sick and dismissed me. I afterwards learned from a colleague that she recovered after a parametritis of six or more weeks' duration. For a long time the recollection of the case caused my head to ache; for a long time the woman's pale, haggard face and reproachful eyes disturbed my nights' rest.

For a long time I abstained altogether from using the tent; but in the course of time, necessity forced me to employ it again.

One year later, in the country, I was called to see a woman who bled profusely post abortum. Ice in the vagina, vaginal medicated injections (hot injections were then unknown), ergotin, iron-chloride tampon, all failed, helping a short time only at best. My fear of seeing her bleed to death was greater than it would be to-day. I went back to the tent, my antisepsis was more stringent. Pasteur's and Lister's results had penetrated Germany deeper. I dilated, scraped with the sharp spoon, and the hemorrhage was at an end. Later on, I had a very similar case, in which I know that I did not forget to finish with a thorough syringing of the

wound, with a four per cent. carbolic acid solution. In this case, the result was so perfect that a year afterward I had the pleasure of delivering the lady of a full-grown child. In cases in which the mouth of the womb is not patulous enough to allow of scraping it without previous dilatation, Fritsch recommends to scrape with an "ear-spoon," so as to avoid the tent. While recognizing the authority of Fritsch, I have my doubts whether cases, which require scraping, would yield *complete* results thereby. Besides, the diagnosis remains obscurer, as you cannot, as a matter of course, introduce the finger into the womb. Of late years, I have not had much opportunity of forcible treatment of these cases of abortion, because the more I saw, the more I was convinced that a great deal of loss of blood could be borne innocuously, and thus I treated most of those cases where I would use forcible means formerly, on the expectant plan merely. Nature's efforts succeed remarkably well with the abortus as well as with retained placenta, in which the loss of blood would seem to lead to death, before nature has finished her work.

I once had an ante-abortum case which ran a very bad course. Despite the fact that I had several cases in which I used the sponge with good results, some of those cases in which abortion was designedly induced, still I believe there are better means than the sponge for this purpose. In the case just mentioned I yielded somewhat to the pressure brought to bear on me to hasten the abortion, though against my convictions, because I have become more and more convinced of the fact that the slower an abortion takes place the better will it be; the less likelihood of retained placenta. We should not, however, lay aside our convictions to any amount of earnest appeals to pro-

ceed actively and hurriedly, unless we see indications of imminent danger from flooding, or unless the thermometer indicates a rise of temperature. In this case the sponge was expelled with the ovum. Having removed everything, and while about to syringe out the womb, I was called away in great haste. The consequence of this neglect was that after five days (probably so late because the sponge was well disinfected) fever manifested itself. Disinfection of the womb, quinine, etc., caused its disappearance in three weeks. There was not a very well defined parametritic tumor on the left side.

In cases of flooding from intra-uterine polypi, the tent has achieved its greatest triumphs. In such a case it actually saved the life of a woman who had bled nearly the year round. Her medical attendant was extremely despairing of the case as he requested me to see it in consultation. Active dilatation with three sponges, and forcible scraping out of several large and many small polypi, together with Routh's injection, gave the dying woman a new lease on life, and she still lives. But it took two months before she could go round about again, though no fever was present. At the time of the operation her pulse was wiry, her color like a sheet of paper, and her legs œdematous.

(I will give, in parenthesis, the formula of Routh's injection, and remark that it is far preferable to solutions of iron for purposes of injections into the womb, because it does not form any coagula, though it has great styptic properties. This is the formula: R. Iodinii, 3 i. ; potassii iodidi, 3 ii. ; alcoholis, 5 ii. ; aquæ, 5 vi.)

It is known that with the aid of the tent intra-mural polypi can often be enucleated. Thus far, no such case has occurred to me.

Let me briefly mention yet a few other indications in which I would use the sponge-tent. I take the liberty to propose its use for dilating the œsophagus. The treatment must be gentler than when sounds are used. I would take a tupelo or gelatine-coated tent, tapering to both ends, and fastened to a long, strong thread. Draw the thread through an œsophageal sound, the rounded end of which is cut off. With the thread in tension, the tent would stay partly in the tube, and so could be guided with it. Having gotten it well between the constricting parts, withdraw the sound and leave the thread hang out of the patient's mouth.

In a similar manner strictures of the urethra and of the rectum could perhaps be dilated, and with greater advantage than by the methods now in vogue.

Since writing this, Prof. Bergmann has dilated with the tent an œsophageal stricture from the stomach side, after gastrostomy.

P. S.—In the discussion of this paper by the society, it was mentioned that the tupelo-tentsought to be used almost exclusively, just because of the dangers of the sponge-tent, as set forth in this article. The author replied, in summing up, that this was precisely what he meant; the very intention of the paper being to put the medical public once again on their guard in respect to sponge-tents, although he did not mention the many cases in which he used the sponge-tent without any cause for complaint. With tupelos he did not have, so far, any untoward accidents either, but his experience with them is very moderate yet.

[The dilating tent of sponge or other material is less used now than in former years, and the prospects are that its use will become more limited. Whether

used as a means of diagnosis or as a curative agent, it is always dangerous, and conservative gynecologists seek other and safer means to accomplish the same ends. The danger of causing blood poisoning which obtains many be to some extent guarded against by antiseptic means, but the greatest danger is that the tent is a typical irritant and is sure to induce more or less inflammation, especially if the use of one tent is immediately followed by another, and one or both are permitted to remain in place as long as twenty-four hours.

It is unnecessary to leave the tent in place more than five or six hours. In that time it will have dilated all that it is capable of dilating, and if left in place longer it tends more surely to excite inflammation.

This unnecessarily long use of the tent, which is the practice of Dr. Hartwig, is objectionable and dangerous.

The case of dysmenorrhœa membranacea, reported in the foregoing paper, illustrates this very well. The patient was cured, but the history shows that she came near dying during the treatment.

As a means of diagnosis it may be said of the tent that it is seldom called for, other means being sufficient.

As a preliminary to using the curett, it is, as a rule, unnecessary.

As a curative agent in "*chronic uterine infarctus*," it is at least no more efficient than other agents that are safer than the tent.

A. J. C. S.

Health of Criminal Women.

Dr. E. M. MOSHER (*Boston Medical Journal*) sums up his extensive observations on this subject thus: 1. Intemperance and unchastity are the two vices which fill our penal institutions

with women. 2. The influence of these vices is detrimental to health of body, increasing its susceptibility to disease and lessening its recuperative power.

3. The diseases which follow as a direct result of these vices are syphilis, alcoholism, dyspepsia, rheumatism and general anæmia.

4. Morbid conditions of body react upon the moral nature, increasing and perpetuating the tendency to criminality; hence the importance of careful medical supervision as a reformatory measure.

5. More ample provision should be made in all large cities for the isolation and thorough treatment of venereal patients of *both sexes*, either by the addition of special wards to the general hospitals or by the establishment of hospitals for this class.

6. The women who commit high crimes, that is, larceny, burglary, arson, manslaughter, etc., possess a more sensitive nervous organization than those who commit only offences against chastity and public order.

Iodine Externally and Internally in Amenorrhœa and Dysmenorrhœa.

It is rare, says CHERON (*Revue De Therap.*) that amenorrhœan and dysmenorrhœa are not complicated by lumbo-abdominal neuralgia, which adds to the painful state of the utero-ovarian apparatus in these affections.

Tincture of iodine freely applied every two or three days over the region of the kidneys, acts very much in the same manner as the application of heat, that is to say it stimulates the centers of vaso-motor innervation of the lumbar portion of the chord, and of the sympathetic, and at the same time tends to relieve the congestion of the genital apparatus. By this congestion the normal uterine flow is interfered with, being retarded or suppressed.

The tincture of iodine alone will

suffice when the lumbo-abdominal neuralgia is not internal. If the neuralgia is internal Cheron employs the morphinated tincture of iodine: Tincture of iodine 30 parts, sulphate of morphia, 1 part. Used internally, iodine is, of all the emmenagogues, one of the surest in its action, more particularly in cases of corpulent persons with very white skin, in whom the lymphatic type is predominant. Iodine may also be employed with good effect in the following formula, whatever may be the cause of the menstrual trouble: Tincture of iodine, $1\frac{1}{2}$ parts, tincture of aconite, 2 parts, syrup of tolu, 400 parts. S. Dose, one, two or three teaspoonfuls before each meal, or one spoonful for three days, two for three days, and three for as long a time as may be desired.—*Med. News.*

[Our experience confirms the views of Cheron in regard to the use of iodine in amenorrhœa of corpulent, lymphatic women. Presumably it acts by stimulating the mucous membrane to higher unctinal activity.

Women of this temperament are most liable to amenorrhœa, hence the value of the remedy.]

A. J. C. S.

Malformation of the Vagina (Simulating Extrophy of the Bladder.

At a meeting of the Boston Society for Medical Improvement (*Boston Med. and Surg. Jour.*), Dr. T. M. ROTCH showed a specimen which had been seen by many physicians during life at the West End Dispensary, and had been mistaken by all of them for extrophy of the bladder. There was a large abdominal hernia, and below it a mucous surface that had been taken for the posterior wall of the bladder. On this surface were two cul-de-sac, which from their position had been taken for ureters. Still below, and in the median

line was a large orifice resembling the meatus of the urethra. A dissection showed this to be the vagina, a probe passing outward from the uterus coming through it. The supposed ureters were culs-de-sac. Below them were two hitherto undiscovered orifices, the right of which was a blind opening, the left being the real urethra, as water flowed out through it when injected through either of the real ureters. By following down the ureters, a normal bladder was found through which the water passed. The exposed mucous surface was therefore a malformation of the vagina.—*Id. Med. Jour.*

Electricity for Ovarian Pain.

From the *Rev. de Therap.*, we learn that Mr. Apostoli makes use of a faradic stream of high tension applied to the uterus, either by means of a double uterine electrode, or of on electrode pushed into the vagina, the other being placed on the hypogastrium. The stream must never be powerful enough to excite pain; the sittings must generally be repeated daily, and last about ten minutes.—*Med. and Surg. Reporter.*

DISEASES OF CHILDREN.

Convulsions in Children.

Dr. WM. T. PLANT (*Archives of Pediatrics*.) Clinical Lecture. We will suppose that the fit is not over and that you find the little one in such a condition as I shall now describe: It is lying, perhaps, in a small bed-room. The ladies of the block or neighborhood, as many as can get in, are there, consternation in their faces and pity in their hearts, all anxious to help if they only knew what to do. The patient is really in a pitiable state. The whole body is

in violent, uncontrolled action. The facial muscles are twitching, giving to the features the most frightful expressions. The mouth is distorted; and often the lips and chin are covered with a bloody foam. The eye-balls are turned up under the lids, or to one side, or are rapidly jerked this way and that. The lingual muscles take part in the general mêlée and frequently the tongue is severely lacerated by the teeth. The head is drawn backward or to one side by a succession of spiteful jerks. Generally the face is livid from congestion; exceptionally it is pale. The arms and legs are in ceaseless convulsive movement. The forearms are rapidly bent and extended on the arms; there are alternate movements of incomplete pronation and supination and the limbs are twisted and drawn into various awkward and grotesque shapes. Usually, the legs are less roughly dealt with than the arms.

The respiration is hurried and superficial; in some cases it is quite suspended for a time owing to rigid spasm of the thoracic muscles. This is a chief danger of fits in young infants—fixation of the respiratory muscles. Older children almost always recover their breath in time. Often there is a guttural noise that sounds as if the patient was in great distress.

If you can get your ear over the heart you will probably find it in tumultuous action; not wholly because of its share in the convulsion, but chiefly, perhaps, because of the agitation of the body and interference with the circulation. The pulse is variously affected, but I have hardly ever been able to count it owing to the constant movements of the body and the jerking of the muscles.

There is no outcry, or appealing look or other sign of conscious suffering.

General and special sensibility are apparently abolished. A copious perspiration bedews the surface.

What shall be done? First, evoke order from confusion. Here are good ladies longing to be of use; give them something to do. Ask one of them to provide a plentiful supply of hot water; and another to look up a bath or wash tub. If the child is in a small room, assign to another the task of carrying it to a larger one and loosening the clothing at the neck and waist; or better, of removing all clothing and wrapping in a flannel blanket. Probably by this time the bath is ready. See that the water is warm enough. It ought to be from 95° to 97° F. Ask one or two of the attendants to place the patient in it, immersing to the neck. Unless the child is very young, it is a good plan to stir a handful of mustard with the water of the bath. If the head is hot and the features dark from congestion I would at the same time wrap the head with a cloth wrung from ice-water; but I would not do this when the appearances are those of cerebral anæmia. If unable to procure a utensil large enough for a general bath, the feet and legs may be thrust into a pail of hot water with mustard. In most cases you will observe a speedy decline in the violence of the movements, and in a few minutes they will have ceased. There is an almost magical relaxing power in a general hot bath.

The fit being over, the child is to be wrapped in warm flannels and laid in bed. I like Ellis' plan of wringing woolen cloths from the hot mustard water of the bath and after sprinkling with a little more mustard winding them about each leg and foot. Be careful not to excite too much action in this way.

It is my habit to give a full dose of

bromide of potassium and to repeat it in an hour or less if there are any symptoms of nervousness. From two to five grains may be given to a child of two years. It is often effectual in preventing a return of the trouble.

But sometimes the fit is prolonged notwithstanding the hot bath, or it gives way only to come again. My next resource would be chloral by the rectum. Do not give too much. From three to six or eight grains in a teaspoonful of starch or mucilage is a safe and usually an effective dose.

If the fit still persists or shows evidences of returning, you will do well to resort to an emetic. To this end you may give, when the child can swallow, from three to five grains of ipecac or its equivalent of the syrup, repeating in a few minutes if there should be occasion. Independently of its power to empty the stomach of offending matters, an emetic will sometimes put an end to convulsions that have resisted other treatment.

These measures, one or all of them, are almost always effectual, but if in spite of them the fits should continue, I would resort to anæsthesia by inhalation; not continuously but as may be necessary to hold the convulsive movements in check. Remember that for prolonged administration ether is a safer agent than chloroform. Authors have always recommended and do still recommend blood-letting when the face is turgid and the convulsions are strong and the child robust. I believe it to be, in this condition, a reliable and valuable remedy and I would not hesitate to resort to it if success delayed to follow the means already advised. I can well believe that there may be occasions when a prompt venesection may save a congested brain from irremediable injury.

But at length, by fair means or by foul, the eclamptic condition disappears and is succeeded by a period of stupor, amounting usually to a heavy slumber. But even in sleep you may frequently notice a jerking of the limbs; sharp, flexion of the fingers and toes; twitching of the muscles about the mouth and half open eyes—appearances that warrant the conclusion that the tendency to convulsions is not yet over.

Anything that irritates or disturbs the nervous system of an infant may plunge it into fits. In hydrocephalus and meningitis, both cerebral and cerebro-spinal you will often meet with them. In fact, I think cerebral hyperæmia is the commonest of causes and that, as you know, may come from many disorders.* Transient fevers from indigestion and taking cold as well as typhoid fever, pneumonitis, pleuritis and peritonitis may cause fits through high temperature and active congestion of the brain. Dentition is likewise a fruitful cause, partly through nervous erethism and partly through cerebral congestion. Severe cases of whooping-cough are occasionally attended by convulsions, caused, we may suppose, by a passive congestion of the brain.

If you practice in malarial districts you will observe that in infants the cold stage is often marked by a convulsion rather than a chill.

You may note it as an interesting fact that cerebral anæmia, as well as hyperæmia may be a cause, opposite conditions giving rise to the same symptom. Large losses of blood and exhausting diarrhœas that rapidly render the brain anæmic, not seldom lead to convulsions.

Furthermore you may very often find the cause in an overloaded stomach.

Worms, especially the lumbricoid and ascarides, sometimes excite eclamptic

spasms, but not nearly so often as the laity think.

Strong emotion is an occasional cause. Many a child has been "scared into fits."

There have been many instances of nurslings being thrown into spasms through disturbances of the maternal system by anger and inebriety and the onset of acute diseases as also by the return of the menses.

I must not forget to mention the fact that all serious disorders in children are in their latter stages liable to this symptom. The physician learns to dread late convulsions. They show that the disease has made a profound impression upon the nervous system and they are very apt to precurse a fatal termination.

The liability to eclampsia—for such is the name often employed to designate convulsions—is not the same at all ages or in all children. I think you will find it most frequent during the second and third years, though many older children are not strangers to it. Many escape altogether though exposed to the causes that produces it in others. Some children I have known to have a convulsion with the onset of every trifling ailment. A highly sensitive and nervous temperament is favorable to their appearance and temperaments are inherited; so that eclamptic seizures are common among the children of some families, rare in others.

But many times there are no premonitory symptoms whatever, and the child leaps at one bound from full health into a terrific fit.

Not all cases are so severe and frightful as the one I have described. The seizure may be so light as to seem scarcely more than a transient nervous perturbation. Sometimes only one side of the body is affected; and indeed

when it is bilateral, one half is usually more convulsed than the other. Grinding of the teeth, rolling of the eyes and flexion of the digits are but convulsions in miniature.

The fits are variable in number and duration. Often there is but one; sometimes there are many following hard on one another. A single one does not last more than three, or five or ten minutes as a usual thing; exceptionally, for half an hour. In one case that occurred in my practice some years ago, a lusty boy was taken suddenly in the morning and was in strong convulsions, with an occasional remission but no intermissions, for twenty-one hours when he died. This was one of the cases in which I was entirely unable to ascertain the cause.

Whether light or severe, a convulsion is but a symptom and your prognosis will always depend on your conviction as to the nature of the cause. If there is progressive cerebral disease there is small ground for hope. If the cause is trivial and transient as teething or indigestion, the outlook is hopeful however severe the spasms may be. Occurring at the outset of acute febrile diseases, they are not to be regarded as of unfavorable omen, though some rare cases of variola and scarlatina must be excepted; but occurring in the course of and especially near the natural termination of these disorders the outlook is serious and experience will teach you to be chary of strongly encouraging words under such circumstances.

There are remote as well as immediate dangers from eclamptic fits. Paralysis of various parts may remain, though these are not usually, I think, permanent. In such cases we may presume that some lesion of the brain, as hemorrhage, occurs as the result of the convulsion.

Some children are left in a lasting condition of semi-idiocy. In my own practice a promising girl was taken in strong convulsions in the middle of the night. For some time after they were often repeated leaving her in a giddy and unbalanced mental state which time has not improved. In another case in which the fits were equally without forewarning or apparent cause, the power of speech was for a long time nearly gone. In that respect the patient has improved, but she is still of a spiteful temper and given to fits of ungovernable passion.

Regarding treatment I have some things to add to what I told you at the outset. "Forewarned is forearmed." When your attention is asked to an infant that has premonitory symptoms—jerking tendons, fixed thumbs and fingers, half open eyes, grating teeth, etc., that is your opportunity for forestalling trouble. Give a cathartic as a grain or two of calomel with magnesia, or three grains of hydragum cum creta with castor oil; give a hot mustard foot-bath and a dose of bromide or valerian at bedtime, repeating as there may be occasion. If the bromide alone will not control these symptoms I would combine chloral with it in quantities of from two to five grains.

If you find hot and swelling gums over advancing teeth, use the gum lancet as I shall direct when I talk to you of dentition. I have known great apparent relief from this little operation.

Whether you find a cause in dietetic errors or not, if the abdomen is tumid, the tongue coated and the breath offensive, you are justified in resorting to purgatives. I know of none better for this condition than those above recommended. One grain, or even a half grain, of calomel, well rubbed with sugar, frequently acts very happily.

Bearing in mind the possibility of worms as a cause, I am much in the habit of combining santonine in a suitable dose with the above laxatives or giving it with castor oil.

Though not appropriate in most cases, though even harmful in some, there are occasions when opiates are of the utmost service in warding off convulsions. I refer to cases of cerebral anæmia from loss of blood, or profuse diarrhœa attended with pale features and, if the child is under one year, with a depressed fontanelle. Severe pain also affords an indication for their use. In a drop of laudanum or its equivalent of paregoric with brandy or bourbon and the hot bath, you will find, I think, your best safeguards.

The diet of children subject to fits should be carefully attended to. It ought to be nourishing, but plain. Milk, bread, oat-meal and potatoes, with lean meat now and then, should be the staples. Occasions of excitement, anger and fright should be avoided. There should be daily exercise out of doors, and a daily cool bath. Attendance on school had better be deferred until the health is completely re-established.

OBSTETRICS.

Arrest of Development Caused by Intra-Uterine Pressure.

DR. A. F. HENDRIX, M. D. (*St. Louis Courier of Medicine*). Mrs. M., married, aged forty-two, the mother of seven children born at full term, and two miscarriages. Those at full term were all healthy and well-developed. She and her husband are both healthy and industrious people, and not in any way dissipated.

The case in hand was born at maturity, and presented at birth, no evidence

of any unhealthy condition, but, on the contrary, was perfectly healthy and plump.

The child, when this cut was taken, was just four months old, and has never

ed. The thighs, as you see, are at a right angle with the sides of the body, and the legs are flexed onto the thighs: You will observe that the tissues of the thigh pass over the knee-joint on the

side flexion, and are so attached to the leg as to confine it in that flexed condition, the heel being in close proximity to the nates. The patellas are fixed, so that further extension cannot be made, even if the soft tissue would admit of it, which they will not. The thighs may be brought together in front by pressure with the hands, but as soon as the pressure is removed, they immediately resume their former position.

At birth the feet lay with their flat (plantar) surfaces together; the heels were just above the pubis, and the toes pointed towards the

umbilicus. The thighs lay close to the side of the body and in handling the child, you seemed to be handling the trunk simply, without legs. The latter feature still maintains.

The woman gives, in substance, the following history :

When I was four months pregnant, and on my way home from a funeral, the driver of the carriage left his seat and went into a saloon. The horses ran away and I became terribly frightened ; at one point the carriage came near being precipitated down an embankment. I was standing up in the carriage at the time, and the sight left my eyes, and I



FIG. 1.—ANTERIOR VIEW

been sick. The scars which you notice, were present at birth, together with two others symmetrically situated, one on each knee, corresponding to the other margin of the patella. You also observe two others symmetrically situated at a crite corresponding to the great trochanters ; and those in the medium line—the one uppermost corresponds to the apex of an antero-posterior curvature of the spine, and the lower one to an abrupt projection of the lumbar vertebra. There is also a slight depression on each elbow. You will also observe that the internatal crease is wanting. The labia majora are imperfectly form-

sat back with considerable force upon the carriage seat. I then felt a pain in my back. The horses ran for more than two miles, and were finally checked by a boy who ran out in front of them. As soon as the door was opened I stepped out, and in doing so, missed the carriage step and went directly from the bed of carriage to the ground, lighting on my feet with considerable force. I then felt pain in my side, that is, in the outer side of the abdomen near the groin, in the inguinal region. The latter pain was not of long duration, but the pain in the back continued, with more or less intensity, throughout. Towards the end of my pregnancy, the pain became very severe so that I had to remain in bed for the most of the time. I also discovered, some time before my confinement, two lumps, one on each side, corresponding to the inguinal region. They were larger than a hen's egg.

The midwife, who was first in attendance, stated that the labor was a dry one and that the pain in the back was excruciating. After Mrs. M. had been in labor many hours, I was called in, and found her almost delirious with pain in the back (in the lumbar region). I made a digital examination *per vaginam* and found the feet presenting high up (at the superior straight). I also observed those "lumps," as they projected out on either side. They proved to be the child's knees and were very prominent.

After much difficulty, I succeeded in

bringing down the feet and effected the delivery, the child to all appearance being dead, but it soon revived and cried lustily. I then observed the condition which I pointed out in the beginning of

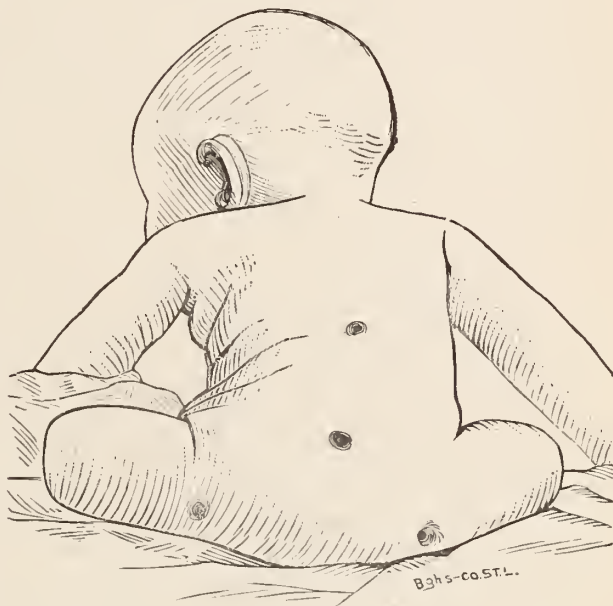


FIG II.—POSTERIOR VIEW.

this article. The pain in the lumbar region of the mother was relieved coincident with the delivery of the child, and she still remains free from it.

I find in surgical works, considerable literature in regard to intra-uterine pressure as a cause of congenital club-foot, but in most cases the theory is objected to, and other causes assigned for the deformity.

Having consulted a number of authors, to wit, Billroth, Syme, Holmes and others, I find no statement bearing upon this case. But quite a number of local physicians and surgeons have kindly examined the case, at my request, and have given me the benefit of their observations. Some of these favored the theory that an injury had been sustained

by the spinal column, followed by curature, and suppuration, and that the scars indicate the point at which the pus escaped. Others, with me, believe that the scars are due to intra-uterine pressure exercised upon the fœtus, beginning at an early period of life. I believe the carriage accident was the predisposing cause. The child took an unnatural position, sitting as it were, in such a way, that the thin, soft, flexible spinal column was made to flex upon itself, and being held firmly in that position by the uterus, was made to retain the curve and projection before described, and the same pressure was brought to bear upon the prominences causing, not sloughing as would appear from the rational signs, but arrest of development of the soft tissue at these points. Now, in conclusion, I would say, that I am well aware that the case just reported is one of but little practical utility, but it is of great pathological interest. It is unique, so far as my observation and research extends, and, I am sure, will go far to substantiate the fact, that most congenital deformity and monstrosities are to be accounted for by the position, which the fœtus occupies in the uterus, and the scarcity of amniotic fluid, in consequence of which the walls of the uterus are allowed to come too forcibly in contact with the embryo, causing it to retain almost any shape which it may accidentally assume.

A Remarkable Case of Obstetric Practice.

Dr. T. A. RODGER (*Can. Med. Record*). A case came into my hands on the tenth of October, the patient, aged 32 years, being pregnant for the fourth time. I was present at the birth of all the former children, and found nothing unusual. The history of the case, which is brief, is as follows. On the morning

of the tenth of October I was requested to visit a Mrs. L., whom it was said had been ill all night with great difficulty of breathing. I found the patient in bed, half sitting, half reclining on her side, and propped up with pillows. Her countenance was somewhat anxious, face slightly livid, eyes staring, breathing very hurried and short, and complaining of great tightness about the chest and abdomen, with a sense of suffocation.

This being my first visit to this patient at this time, and not thinking that she was pregnant, I at once examined her chest, found heart and lungs normal, but was struck with the size of the abdomen. Her feet and legs were somewhat œdematous, but no great amount of swelling at the vulva. There had been slight pains at long intervals all night, but the patient said "not like labor pains," though she thought that she ought to have been confined some time during the month of September, having, as far as she can recollect, menstruated for the last time about the beginning of the year.

The size of the abdomen being so much out of proportion to anything I had ever witnessed before, I began questioning as to her condition for some time back.

She told me that nothing out of the way was noticeable in the size of her abdomen until between the sixth and seventh month; that never at any time could she say that she felt any distinct movement of the child, such as experienced with her other children; that she had suffered considerable at different times from irritability of the stomach, in fact, had often great difficulty in retaining food. A vaginal examination revealed the os to be high up, dilated about an inch, edges tense but thin, membranes entire, but no presentation

could now be felt. Examination of the abdomen gave dullness on percussion throughout; no movement nor outline of the fœtus could be made out, and by auscultation could not get either heart sounds or placenta bruit.

Through the assistance of the friends present I changed the position of the patient to one which I thought more favorable, or which might assist me in detecting a presentation, but all without any effect whatever.

The distress of the patient being so great, I felt that some measures would require to be adopted at once for relief, so I gently dilated the os until I succeeded in passing the greater portion of my four fingers within the uterus, taking care at this point not to tear the membranes, still no fœtus could be felt. Satisfying myself as to the toughness of the membrane, I passed my whole hand between the latter and the walls of the uterus and endeavored to rupture the membranes with my fingers, but failed. Without withdrawing my hand, I passed, with the left, a knitting-needle, when the rush of water was tremendous.

Continuing my search for the child, my arm acting as a plug in the vagina, I could find nothing in the uterus proper, having passed my hand all around the walls; but, at the upper end or fundus, a circular opening about the size of a silver dollar, edges somewhat thick, and unyielding to ordinary force by the fingers.

Passing my forefinger through the new opening, touched the mouth, nose and eyes of the child; then gradually succeeded in getting in a second finger when no forehead could be felt, in fact, no head.

With the gradual escape of some portion of the amniotic fluid I found that I could use more force with my fingers in dilating, due to this second uterus, if

I may so call it, being brought near to my hand. Owing to the alarming condition of the patient at this point, and fearing delay might not serve any good purpose, especially if the escape of the amniotic fluid was permitted, there being a possibility of collapse, I determined at once upon version and set to work to force my hand into the interior. After considerable resistance had been overcome, both feet of the fœtus were grasped, completing the delivery of a still-born acephalic male child, weighing about six pounds. Fluid ext. ergot was given to ensure uterine contraction, and after delay of a short time the placenta came away by gentle traction with the hand, followed by slight hæmorrhage.

The woman was not in a condition to warrant further interference, otherwise I should have liked to have passed my hand and further investigated the interior of the uterus, but feared that possibly such procedure might be attended with bad results.

This is now the 16th day since the patient was confined, and I may state that she is doing well, no bad symptoms having appeared, so far, in the case.

Abscess of the Breast during Lactation

Dr. A. JACOBUS states (*Am. Jour. of Obstetrics*) that he has found the following mixture an excellent tonic and preventive of excessive suppuration in cases of mammary abscess: \mathcal{R} . Strychniæ sulph., gr. ss.; tr. ferri. chloride f. \mathfrak{z} iiss.; acid phosphor. dilut., f. \mathfrak{z} ij. aquæ. q. s. ad., \mathfrak{z} iv. M. Sig. One teaspoonful in a wineglass of water after meals.—*N. C. Med. Jour.*

Iodoform in Obstetric Practice.

The germ theory of puerperal diseases has called into vogue the treatment by

germicides, which really constituted the essence of the treatment recommended by Dr. THOMAS, to which we recently referred. In this connection, we note that Ehrendorfer (*Arch. f. Gynakologie*) has had good results, in a limited number of cases, wherein, on account of instrumental delivery or other causes, infection was to be feared, from the use of iodoform. The method employed was the following: The uterus, after the expulsion of the placenta, was washed out with a solution of carbolic acid (one per cent.), and then a bougie containing five to ten grammes of iodoform was pushed into the uterine cavity beyond the inner orifice, and allowed to remain there. No vaginal injections were used afterwards, and only in seven cases was a second bougie introduced. This method was employed in twenty-seven cases; of these three died, and two were transferred to other parts of the hospital. There were but two cases of natural labor amongst the number; the rest were cases in which operative interference of some kind had been necessary, or cases of abortion with retained placenta.—*Med. and Surg. Reporter*.

[The use of iodoform has recently been introduced into the lying-in-department of the Long Island College Hospital. The vagina is douched with a 1-1,000 bichloride solution at the beginning and close of labor. After each douche a suppository of iodoform is placed against the cervix.

Similar treatment is applied to the uterine cavity after labors involving manipulation within the uterus, or in case septic fluids are present. Perineal wounds are immediately dusted with iodoform powder and sutured. No prophylactic injections are subsequently practiced during the puerperium.] J.

Expulsion of the Placenta.

PROF. DOHRN sums up the comparative results to the woman, in cases in which the placenta was left to nature, spontaneously expelled, or treated by Crede's method (*Med. News*). 1. In one thousand lying-in-women, in whom the expulsion of the placenta was left to nature, the results were far better than in one thousand others in whom Crede's method of expulsion was used. 2. The one thousand lying-in-women in whom the placenta was spontaneously expelled had considerably less hemorrhage and fever after delivery. In those cases treated by Crede's method, portions of the membranes were frequently retained, and there were more fatal cases than in others. 3. The disadvantages which are conditional to the method of Crede are especially seen in the cases in which the placenta is expressed during the first five minutes. After a longer time the expression was more complete, but never as safe as by the spontaneous method.—*Weekly Med. Review*.

Long Retained Pessaries.

It may prove useful as furnishing the key-note to some obscure cases of ill-health, if we bear in mind that cases are on record where a pessary has been introduced to correct some uterine deformity, and being forgotten, has been allowed to remain for years in the vagina, acting constantly as a foreign body, provoking inflammation and suppuration, and producing a variety of morbid phenomena through the agency of reflex nervous influences. DR. C. F. PAINE reports a case in the *Texas Courier-Record of Medicine*, where a Hodge pessary, forgotten and worn for thirteen years, has, he fears, permanently injured the woman's health.

DISEASES OF WOMEN.

Electricity in Uterine Displacements.

Dr. E. A. BARTLETT (*Med. Annals*):

In many cases the pain in the loins, dragging of the viscera, almost constant backache and other characteristics tell too plainly where the seat of trouble is. Mal-positions are found in a large percentage of these cases, and it is to the *rationale* of electricity in their treatment that your attention is invited.

Adopting Simpson's division, we have two classes of displacements—*versions* and *flexions*, the latter being not an exaggeration of the former, but an entirely separate condition. In the former the uterus may be turned upside down and still the canal be relatively straight, while in the latter the canal is bent upon itself at more or less of an angle. This fact is important, because it points to various causations, and necessitates treatment peculiar to the case. These mal-positions may be due to a variety of causes. In the poorly developed uterus anteversion is about in proportion to the want of development, but in far the greater number of cases they are due to congestion, engorgement and hypertrophy. The veins of the uterus are normally of large size, and as a result of carelessness during the puerperal and menstrual periods they are only partially emptied, venous congestion takes place, the organ is engorged, and there may follow hypertrophy of tissue. Any cause producing relaxation of the suspensory ligaments and the vaginal walls finds an admirably in this overburdened uterus, and version is the result. If, however, there has taken place degeneration in the muscular fibre of the uterus, flexion will be the result.

We know that electricity acts, when

passed through the human body, either mechanically or chemically, either directly upon the organs or indirectly through the nerves. Now, if we remember what conditions exist in a displacement and some of the principal causes, we shall surmise that the use of electricity will be followed by very satisfactory results in many cases, but we shall also realize that there will occur many cases in which electricity alone would be just as powerless as any other application. In one extreme case of version or flexion it is manifest any conceivable application of electricity would, of itself, be useless to accomplish reposition. Were the supports to the uterus composed of muscular fibres, and were they in a condition of extreme relaxation, there might be a possibility of causing sufficient contraction to bring the organ into place. This is not the case; a portion of the ligaments supporting the uterus are simply folds of peritoneum containing no muscular fibre of their own, while others are the usual ligamentous tissue; both have some muscular fibre prolonged upon them from the uterine walls, which may be excited sufficiently to render some service in slight versions, but in severe or extreme cases they are of no appreciable service.

The foregoing is a true statement of facts; nevertheless, experience reaches us that an ante-, retro-, or latroverted uterus, if not too far gone, can be replaced under the use of electricity, and this, in many cases, applied only exteriorly. How is this result produced! Placing one electrode of a faradic machine upon the lower lumbar vertebrae and the other upon either inguinal or hypogastric region, let the circuit through the primary coil be closed; there will be felt, if the current be sufficiently strong, a sharp contraction un-

der the latter electrode. This has by some been assumed to be the action of the uterus and its supports: the assumption, however, is manifestly erroneous, as we have seen there are no muscular fibres in the uterine supports to contract, or at least not enough to cause so violent a contraction; and the uterus lies so deep in the pelvis that the contraction of its fibres would be much less perceptible externally than what we note. The assumption is partly due to the results obtained in the obstetric use of electricity, where the contractile effects upon the uterine walls are of such marked character. The cases are not parallel, for during parturition the uterus is in the abdominal cavity, where its contractions can be plainly felt, which is not the case here.

If we look at the anatomical disposition of the parts, we shall find that we have under the electrode, when it is in the left inguinal region, the superficial and deep abdominal muscles and below them the sigmoid flexure of the colon; in the right inguinal region the corresponding muscles and beneath, the cæcum; in the hypogastric region, the rectus abdominis and pyramidalis muscles and beneath, the bladder. If we place this electrode upon any portion of the abdomen we shall note, under the same conditions, the same phenomena of contraction, and, if the action be prolonged and extended over the whole abdomen, it will bring about the act of defecation, or a desire for it. This would tend to show that the contraction here takes place in the muscles which constitute the abdominal parietes and also in the muscular coat of the intestines. What is true of this part is also true of the other parts of the abdomen. The contraction felt there is not in the uterus and its supports. If, however, we insert a finger in the vagina and

place it in contact with the uterus, we shall feel a slight thrill and decided contraction of the walls of the uterus analogous to the sensation received during a labor pain; but this contraction is not sufficient nor in the proper tissue to replace the organ, supposing it to be displaced; so we must seek further for the remedial cause.

If we place the electrodes as before, the hypogastric plexus of nerves, from which pass the nerves innervating the uterus and vagina, lying directly in front of the sacrum, is in the field of action for the current. It is just here that Badge and Waller located the genito-spinal centre. The electricity conducted along these nerves to the uterus and vagina there does its remedial work, contracting muscles, altering nutrition and increasing the tone of the relaxed ligaments. Thus stimulated, the displaced organ regains its normal size, and, slowly perhaps, but surely, returns to its proper place.

This method of external application is especially serviceable in vaginal cases and with timid women, but in very rebellious cases, and with married women generally, the introduction of an electrode to the vagina will be found much more efficacious. Not only is the muscular coat of the vaginal walls made to recover its tone, and thus one of the best supports provided for the uterus, but an internal application brings the organs directly under the action of such pole as their condition may require, and enables us to produce somewhat more rapidly tissue changes. Moreover, the chemical effects of the galvanic current upon the secretions of the mucous membrane and the contiguous glands may be utilized by this means, remembering the differential polar action. In like manner, the insertion of one electrode into the rectum or bladder enables the ope-

rator to localize the action very strictly and produce marked results.

It is well known that if a strong galvanic current, passing through the pelvic viscera, be suddenly interrupted there will be produced a "coppery" taste in the mouth. This phenomenon may be made to "point a moral." The hypogastric plexus, of which we have spoken, receives fibres from the spinal nerve, and the vaginal branch has a large number. The diffusion of galvanism along these fibres to the nerves, and thus to the cord, serves to put the spinal cord in an electronic condition, and this irritability modifies decidedly the subjective symptoms accompanying uterine disease. This is really an important feature in the *rationale* of electricity in uterine displacements, and accounts somewhat for the prompt relief which so often follows this kind of treatment, of the despondency accompanying these cases, and which is one of the great drawbacks to calling the attention of a young woman to the fact that she is a subject of "female weakness." But it would be unwise to depend upon this "diffusion of current" for relief of subjective and remote symptoms. The operator who confines himself to localized treatment of uterine disease, neglecting thorough general treatment, sacrifices much of the beneficial effect of electricity. If it is necessary to produce mechanical effects, local faradization is indicated; for local chemical effects, galvanism; but this is only a small part of the work of restoration. The connection with, and relation to, other organs and parts of the body of the organs of generation are so intimate, and derangement here is followed by so much disturbance elsewhere that general treatment of some sort becomes essential. In the form of electricity addressed either to the cerebro-

spinal axis or the sympathetic system we have a valuable auxiliary whose use hastens recovery. In conclusion, time is essential in any form of treatment for these cases, and the patient may be given to understand that relief is not the result of a few days, but of weeks or months.

[It is conceded that electricity improves the nutrition of the pelvic organs and therefore is useful in displacements due to relaxation of the uterine ligaments. It is obvious, however, that it would be more rational practice to replace the uterus and keep it in place by mechanical means while electricity is used to restore or strengthen the normal supports of the uterus rather than to rely upon the electricity alone.]

A. J. C. S.

Posterior Section of the Uterine Cervix in a Virgin for Dysmenorrhea.—Followed by Serious Nervous Symptoms.—Relieved by Trachelorrhaphy.

Dr. THAD. A. REAMY (*Obstet. Gazette*):

March 28, 1882, I was consulted by Mrs. T., a widow, with reference to the health of her daughter, who accompanied the mother to my office. The patient was a blonde, twenty-three years of age, of medium height, well proportioned, except that she was now somewhat emaciated. She was pale, anæmic, nervous. The following history was obtained: She menstruated at fifteen; she was now in school; being very bright, was at the head of her classes, very ambitious. Two years later, at the age of seventeen years, still attending school, menstruation became irregular and painful. The inter-menstrual period sometimes prolonged to eight weeks, at others but two or three weeks intervening. The patient became anæmic, slept badly, complained of pain in the hips,

groins and legs. After several months of suffering, still trying to maintain her place in school, she was placed under charge of a gentleman having some reputation as a gynecologist. He recognized, as he stated to the family, the necessity for a digital examination per vaginam. This was at first refused, but as the family had unbounded confidence, the examination was finally permitted. The diagnosis announced was a slight prolapsus of the uterus with retroflexion, associated with ulceration of the os. The patient was at once ordered to abandon school and within a few weeks was forbidden to leave her bed. For one year she was subjected on an average of three times per week to the introduction of a speculum and the application of various medicaments to the ulcerated (?) os. The vagina, meantime, being packed with wads of cotton alternating with hot water irrigation. Sponge tents were from time to time introduced into the cervix in order to secure such dilatation as would admit of free menstrual flow and thus relieve the unbearable dysmenorrhea. All this, notwithstanding the youth and temperament, the anæmia, nervous excitability of the victim. Subsequently, medicines were introduced into the uterine cavity, or attempted to be so introduced, for the cure of supposed endometritis, which was now added to the long list of serious maladies which, in the opinion of her medical adviser, were present.

As the patient grew no better, but worse, posterior division of the uterine cervix was boldly performed with the scissors, the incision extending nearly to the posterior cervico-vaginal junction. This was stated to be necessary in order to straighten (?) the cervical canal, and widen it.

Strange to say, this afflicted person survived, and escaping from the skill of

her surgically inclined friend, ran the gauntlet of patent nostrums, health resorts and doctors; the latter she tried in different States, consulting one or two men of eminence.

At the time of my examination she was a picture of mental and physical suffering. Such had become her nervous irritability that she could scarcely sit quietly in the chair for five minutes at a time. She presented symptoms bordering strongly upon chorea. There was no pulmonary or cardiac disease, though the heart's action was irritable and a slight anæmic bruit could be detected over the base. Marked fatigue was reported upon the slightest physical or mental exercise. Menstruation was now regular as to time; quantity scanty, painful. Neuralgic pains of the most violent character were complained of, reflecting from the lower pelvic region down the thighs and upward to the lumbar region. Appetite poor, patient frequently suffering from nausea, especially in the morning hours.

A digital examination per vaginam, which I felt myself justified in making after obtaining her *medical* and *surgical* history, revealed the cervical section above referred to with the divided edges widely separated, sufficiently so, at the os, to indicate that probably a wedge-shaped piece of tissue had been removed at the time of section. So widely were the edges separated, so thoroughly were they indurated and thickened, that the deformity was striking. An extensive cicatricial deposit could easily be detected in the apex of the original wound.

An examination by the speculum (Sims') verified and even exaggerated the above description. The uterine probe was carried into the cavity. Some difficulty was encountered in passing the point of cicatricial deposit, otherwise it entered freely. Measure-

ment from os externum to fundus three inches; carrying the sound back into the slit, of course, measurement was much less.

April 25th, not quite one month subsequent to this examination, assisted by Drs. E. W. and G. S. Mitchell, the patient being etherized, I made trachelorrhaphy, removing all cicatricial deposit and closing the wound with six silver sutures. The sutures were removed on the fifteenth day. The result was perfect. Four months subsequently the patient had gained fifteen pounds in weight and was free from pain. Six months subsequently her health was perfect. She is now married and living in a distant State. I am unable to say at present whether she will be fruitful or not.

Of course it is useless for me to add that this was an humiliating illustration of the perversion of judgment which fastens upon some men in our profession should they fall into special lines of professional work. This order of specialism is a curse to our art, a curse to its victims. It brings blight instead of blessing. No man can be a safe specialist who is not an educated and practically safe general practitioner, though he may do but little general practice; he must have had practical and experimental training in this way.

If the attendant upon this poor girl had recognized in her dysmenorrhœa simply the fruits of an over-taxed brain, anæmia, and nervous exhaustion, and had enjoined absence from school and study, nutritious diet, cold sponge baths, iron and bitter tonics, free exercise in the open air (including, probably, change to country for a season), a few months would have been ample for her complete restoration to health. But, unfortunately, being a monomaniac upon the subject of local disease, and knowing no locality but the sexual system, he was

unable to recognize the difference between local organic disease and malnutrition. If he had lost the capacity himself to exercise any functions but those of a specialist, he should have turned this case over to some intelligent general practitioner.

I wish to embrace the present opportunity of entering my protest against the growing practice of subjecting young misses to digital and speculum examinations upon the most trivial complaint, under the ignorant impression that every ache in the lumbar or pelvic region means ovarian or uterine disease, or both, almost always signifying ulceration with displacement (?). Such conclusions are too absurd to command any candid answer. Such conditions in such subjects are extremely rare, and generally due, when found in such subjects, to special and extraordinary causes, constituting a special group of cases which have nothing, in common, with the above diseases.

I must be pardoned for insisting that it is not a trifling matter to subject a young girl to even a digital vaginal examination. It is a shock to her nervous system which nothing but the strongest evidence of disease demanding it can justify. The mortification and demoralizing influence of such treatment upon the subjects here spoken of should challenge every conscientious and true physician to save these young persons from such an evil. I am aware that in certain quarters I shall be charged with here giving expression to a sentiment rather than to science.

No matter. Being now almost exclusively engaged in gynecological practice, I have opportunity to know the extent to which the evil referred to is growing. I should forfeit my own self-respect, and refuse to obey the order of a sacred duty were I to remain silent.

Moreover, outside of the social and moral aspects of the case as presented, such practice leads to disease, not to health. On this ground, therefore, it should be condemned.

[The "sentiment" expressed by Dr. Reamy is sound and as highly commendable as his science. If there were more gynecologists like him there would be fewer wretched young women.

Moreover, the case related reminds us of the fact that posterior section of the cervix uteri is one of the frequently misused operations. The object of the operation is, or should be, to relieve sterility, but if it fails to do so the patient is usually worse not better for the treatment.]

A. J. C. S.

Hydrastis Canadensis in Painful Menstruation.

In one of the recent numbers of the *Archiv. fur Gynakologie*, Prof. Schatz calls the attention of his colleagues to the value of tincture of hydrastis in many cases of painful menstruation, which hitherto have been supposed to need operative interference. The hydrastis contracts the vessels and lessens the genital congestion. Often by its use the pain attending the menstrual epoch is diminished or wholly removed. The preparation which Prof. Schatz uses and recommends is the fluid extract, as prepared by Messrs. Parke, Davis & Co., of Detroit, Michigan.

[This reminds us of having heard a doctor of medicine state very positively that Warburg's tincture would cure dysmenorrhoea. As a matter of curiosity it was fairly tried but without any effect. Perhaps the hydrastis may do better. At any rate it is quite remarkable that Prof. Schatz should use an American preparation of the drug. This shows great German enterprise or else American business tact.]

A. J. C. S.

Rapid Dilatation of the Cervix Uteri; with Report of Cases.

Dr. WM. P. CHUNN, *Md. Med. Journal*: In regard to rapid dilatation of the cervix, I wish to call attention to five cases recently operated on, in which I am persuaded valuable time was saved and in which danger was lessened. And it is the history and results of these cases, as well as the method of their treatment, that I wish to draw attention to to-night.

The first case presented itself some three months ago, and gave a history of persistent menorrhagia and metrorrhagia. This had lasted sixteen months previous to date, at which time she had suffered an abortion. The patient was pale and anæmic, and was much weakened by loss of blood. The uterus being in place, with no laceration, and examination showing no cellulitis, I determined to dilate and curette the fundus, as I felt certain that portions of the secundines were retained. The patient being chloroformed, Sims' speculum was introduced, and the uterus was well pulled down. Dr. Elwood Wilson's dilator being introduced, the blades were slowly expanded, and in fifteen to twenty minutes space sufficient to introduce my index finger was afforded. A Sims' curette somewhat dulled was then introduced, and the whole of the endometrium was gently scraped from fundus to cervix. The whole operation lasted only some twenty-five minutes. After this simple procedure the hemorrhage ceased entirely, the patient being restored to perfect health. My second case presented the same symptoms as have already been described in case No. 1, except that the menorrhagia had lasted only about two months. Physical examination revealing no abnormality in the pelvic organs,

I decided to dilate rapidly the *os internum* and curette the uterine cavity. An anæsthetic having been administered, I passed in rapidly, one after another, the hard rubber dilators of Hegar of Germany. In twenty minutes the *os uteri* was dilated sufficiently to pass my index finger, after which the same curette being introduced, the uterine cavity was thoroughly scraped, as in the preceding case. The patient recovered from the operation and went on to improve steadily, the menorrhagia ceasing almost entirely. The third case occurred in a patient aged twenty-four years, but in this case the hemorrhage was not due to any cause connected with parturition. The uterus seemed somewhat enlarged, and a small fibroid was suspected to be present. Bleeding continuing constant, it was decided to dilate the cervix, and introduce the finger as a means of diagnosis. The patient was accordingly chloroformed, and Hegar's hard rubber dilators were introduced, one after another, until No. 12 was reached. At this stage of the operation dilators Nos. 13 and 14 were missing and could not be found, and dilator No. 15 could not be introduced, as the disproportion in size between it and the one preceding was too great. Consequently the finger could not be used as a means of diagnosis. But the curette did just as well. The instrument being applied to the whole uterine cavity, many granulations were scraped out, much to the relief of the patient, as the bleeding ceased entirely and has not since returned. In this case the Hegar's dilators failed to accomplish the whole purpose intended, but were of sufficient assistance to enable the treatment to be carried out. In the last-mentioned case the dilator did not have a fair trial, as two of the most important sizes were missing. In this instance the cervix was torn so badly by

the tenaculum tearing through that I immediately put in a suture, which acted very satisfactorily. I do not intend to advocate the use of the hard-rubber dilators over and above any other mechanical dilator, for any instrument used for the purpose would have accomplished the purpose where these had just failed.

This method of treatment proving so successful in all these cases, I shall certainly give it a fair trial in the future instead of employing any kind of tent. I repeat, then, that in the majority of cases of menorrhagia or metrorrhagia resulting from abortion or from granulations, and where the uterus and broad ligaments are in normal condition, and when the *os* is somewhat softened, and, lastly, where only sufficient room is needed to introduce the finger or curette, rapid dilatation should be employed, and tents should not be used. I am inclined to think that the majority of practitioners have been using and still continue to use sponge tents in just this very class of cases. The cases reported in this paper are, of course, largely insufficient in number to settle the question definitely, and time only will determine positively. In Germany, I am informed; it is the rule to use mechanical dilatation nearly altogether, tents being entirely excluded. Dr. H. P. C. Wilson has used various sorts of dilators instead of tents for the last year or two, and considers the practice eminently safe and proper. It is possible that I may be somewhat prejudiced in my ideas concerning tents and their uses, but as I have already lost one patient from the use of a slippery elm tent, I would naturally feel anxiety in any case where one was introduced. In many cases where persistent menorrhagia and metrorrhagia are present, resulting from granulations, small polypi or re-

tained secundines, etc., it is not always necessary to use any dilator whatever. In such cases the os is very frequently patulous and soft, and a small hand may easily be introduced into the vagina, and the index finger of one hand made to enter the cavity of the fundus by pressure being made above with the other. Here it is a very simple operation, indeed, to curette the uterine cavity. It has been urged by those in favor of the employment of tents that the simple introduction of a tent may stop a long-standing metrorrhagia or leucorrhœa by itself, and that an operation may not be necessary at all. Such is occasionally the case, but what is generally involved in the "simple introduction of a tent?" The doctor, more than likely, calls in the afternoon or evening the woman is laid on the table, for what she generally calls an operation, a tent as large as possible is then jammed into the cervical canal, causing necessarily severe pain. The woman is then put to bed with a dose of opium and left for the night. If the patient is lucky and the dose of opium large, she may suffer no pain. If the cervix is hard and unyielding, the night is apt to be passed in great discomfort and distress. The next morning the doctor pays his second visit, the woman is again put on the table, and the tent removed, after which it may still be found necessary to use the curette. Septicæmia is also to be added as among the possible dangers. In contrast to this method of treatment, we have that of rapid dilatation, in which the patient is put on the table, a little chloroform is given, the cervix is dilated and the curette introduced, and the whole thing completed in twenty-five minutes. Rapid dilatation has, I believe, almost altogether taken the place of tents in dilating the cervix for stenosis, caused by antifixion

in the virgin state. I have frequently seen Professor Howard incise the cervical canal bi-laterally or quadrilaterally and then introducing his own dilator, stretch the canal to the required limit, thus combining the two methods with great success. I doubt, however, whether any one would be bold enough to incise and then introduce a sponge tent, as in that case, I take it, septicæmia would be almost certain.

By way of conclusion, I think I may say that, in appropriate cases, rapid dilatation has the advantage over tents in two very important particulars, viz.: saving of time and lessening the danger of septicæmia.

[We have long believed that rapid dilatation—to a limited extent—was preferable to slow dilatation by tents, but if this is carried to the extent described above it is not free from danger. Fortunately it is seldom if ever necessary to dilate the cervical canal sufficiently to admit the finger in order to use the curette. Less dilatation and a smaller curette would be safer than the practice recorded in this paper.] A. J. C. S.

Perineal Sweating.

Clinical lecture by J. MATHEWS DUNCAN (*Med. Med. Jour.*) In inveterate cases, however much they may be minor, it is necessary to enter minutely and carefully into every particular, and this is true of none more than that of "whites." A patient will add, as a tail to her case, that she has whites, or she will say she is cured, all except whites; or she will complain simply of very bad whites. By this she implies that she has a large amount of unhealthy discharge from the vagina, white or nearly white, and this she fears, understanding that it is very dangerous, or, at least, weakening. Probably, also, she has

used many diverse lotions without avail for a lengthened period.

Now, it is common to find that this case has been quite misunderstood, and consequently mismanaged; examination by the speculum discovering no mass of mucus or the matter of whites—no such quantity as would cause discharge. It is, indeed, not rare with such complaint to find the passage drier than natural. Such women it is sufficient to tell that they have no whites, that there is nothing to be cured, that they should give up the use of injections of every kind, and it is good to add that, if all proves not to be right, the patient should return with the whites present, and with the diapers worn, or any evidence of the presence of the disease.

When she comes back you may find that she has had some whites after a long walk or long standing—a result which is scarcely to be deprecated. Or you may find some superficial irritation of the vestibule or vaginal orifice, from which a white or non-purulent discharge has come, and which may be easily cured by an appropriate application; and the same may be said of some eczema of the vulva. Frequently all she produces is a cloth damp with perineal sweat, and often also stained brown by it. Lately we had in “Martha” an aggravated case of this kind from a distant county. As we could find nothing, the woman was pressed to produce the evidence of her disease for which she had been long treated, and which so alarmed her as to make her glad to encounter the inconvenience and expense of coming to the hospital. She said it came on when walking, and she was accordingly sent to walk: and, with an air of triumph, she then showed a diaper with a small brown stain of feculent odor. The woman was quite simple

and ingenious, and believed that this stain was vaginal whites. It was plainly some brown mucus from the anus.

When women get fat and sweat freely they often have such moisture about the anus and genitals. This is very disagreeable to them, and, unless correctly instructed regarding it, they are easily induced to believe it is morbid, and the result of vaginal or uterine disease. Both men and women, however, careful and cleanly, have their linen moistened, and often stained brown, especially if they have walked much; and such discharge a woman is easily led to believe to be whites, and an indication of disease of the womb.

Sudden gushes of watery fluids on the linen are sometimes otherwise explained. Not very long ago a patient consulted me for this, believing that it came from an ovarian cyst, and required constant treatment to prevent the cyst closing. I could find no disease by local examination, but I was also told that when it occurred the patient was very alarmed and nervous, and this led me to suspect it might be urine. The fluid was collected in a cup, and found to have all the qualities of urine. The diagnosis communicated to the ingenious patient that her disease was merely nervous discharge of urine was enough for her cure, and she went away rejoicing.

But I must further add that some sudden copious watery discharges I have been unable to explain, and have tried to satisfy myself by supposing they were from the glands of Cowper. The neck of the womb may suddenly secrete copiously, but the secretion is very viscid and not in such large quantities, so far as I have observed, as to explain the gushes I am speaking of.

Cases of this kind may be sometimes minor examples of *hydrops tubæ profluens*. This is a disease probably more

frequent than is generally supposed, but certainly very rare in its distinct and greater forms. A case lately came under my notice where the gushes of watery and slightly viscid fluid were great, and had a general history, as follows: Gradually increasing hypogastric pain and general constitutional disturbance, then copious flow from vagina and relief for a varying length of time. When the woman was at ease there was to be found only an enlarged uterus; when she was in pain and before the discharge there was distinctly connected with the uterus and lying on its left side a large and increasing tense and somewhat tender cyst.

[We have seen several cases of hydrosalpinx in which the fluid was discharged from the tube through the uterus. The history and physical signs were similar to those given above.]

A. J. C. S.

DISEASES OF CHILDREN.

The Management of Potts' Disease of Spine in Very Young Children.

Dr. HAL C. WYMAN (*Med. Age*). The fact that the dreadful malady mentioned in the title frequently attacks children under five years of age and subject to rapid growth, makes it necessary to exercise great caution in the selection of proper apparatus for the treatment of these unfortunate little ones.

A skilled and experienced surgeon has remarked in my hearing that he would rather see his children dead than to see them suffer from spinal caries and the painful treatment by rigid appliances which seldom does little more than postpone the unsatisfactory termination of the disease. This gloomy view of the management of a quite common dis-

ease impressed me profoundly. I saw in my own practice not a few children whose pinched and sickly faces told plainly that the excoriations and difficult breathing caused by the rigid plaster-of-Paris jacket were adding to the fret and worry imposed by the disease. Bringing to mind the marvelously rapid growth of all the tissues in childhood and the great length of time that apparatus must be worn to be of use in the treatment of Pott's disease, I saw clearly that the plaster jacket must be removed often or it would be dangerously detrimental to the health of the young sufferers. I find it impracticable to renew the jacket in cases under five years of age often enough to keep pace with the growth of the respiratory and digestive organs and of the deep muscles of the back which are of great use in diminishing the pressure on the diseased bodies of the vertebræ, and have instead used a simpler apparatus which is applied more easily and which is removed whenever it annoys the peace and comfort of the patient. In adjusting it the child is laid with its back up across the nurse's lap so as to extend the spine to nearly the normal limit. A piece of cotton flannel is laid next to the skin of the back, extending well up over neck and shoulders and down over the sacrum, covering some less than one-half the circumference of the trunk. Over this is laid a sheet of absorbent cotton. Then a bandage of cheese cloth six inches wide and two or three yards long, with the meshes carefully filled with plaster-of-Paris, is dipped in water and folded up and down over the cotton and rubbed smooth with the hand, as in making the plaster jacket. Next a roller of cheese cloth six inches wide, is passed round the trunk and in figure 8 about the shoulders and pelvis until the plaster is firmly adapted to the back.

When it has set the bandage may be unrolled from the trunk and a good firm cast of the back be removed. The edges of the cotton flannel may be sewn to the edges of the plaster and the durability of the apparatus greatly increased. To apply it all that is necessary is to fit it to the back and fasten it there by a good broad roller of cheese cloth carried over it and around the trunk. If properly made it will not slip. No great skill is necessary to fasten it with the roller. The facility with which it may be removed and replaced enables the nurse to give the muscles of the back a good thorough rubbing every night, thereby increasing their power and enabling them to exercise the full limit of their power in maintaining the spine in a position that will permit very little pressure or friction of the diseased parts.

So much for the management of Potts' disease in young children by means of apparatus, but it is only a small part of what must be done by other means to bring the case to a satisfactory termination. There are two objects to be attained by treatment; one is to avert the tendency to death from gradual exhaustion, and the other is to limit the degree of deformity. Both of these purposes involve in their consideration a determination of the stage of the disease. After abscess has formed and opened by sinuses in glöin or gluteal fold, or elsewhere, when the case first comes under good surgical care the pus cavities must be carefully washed with antiseptic solutions. I have syringed such channels daily with a wash composed of boracic acid $\frac{3}{4}$ ss. corrosive sublimate gr. ss, pure water Ojv, warmed to the temperature of the body before using. Two ounces of this solution will usually suffice to flood and thoroughly cleanse the sinuses.

In a case where an ugly sinus discharged between the angles of the 10th and 11th ribs I made a fenestrum in the plaster cast, and while it was not necessary for the purpose of washing merely, it was very convenient for the application of absorbent cotton to take up the discharges after washing. All sinuses, after cleansing with the aforementioned solution should be carefully protected by a dressing of absorbent cotton or oakum and a layer of antiseptic gauze; septic fever may be effectually combatted by these means.

In the stage which precedes the formation of sinuses the patient should be examined often and the moment fluctuation is detected the aspirator should be used to withdraw the fluid. The strictest cleanliness should be observed in this matter. The smallest quantity of air entering an abscess may be a source of septic infection. Children are very sensitive to putridity. I have known the careless use of the aspirator to be followed by weeks of hectic and pain, causing life to be disappointed of. Before abscess appears, while nature is carrying off the products of her attempt to repair the damage which has been done by trauma and misère physiologique, the treatment should be of a character to diminish the tendency to abscess and limit the amount of deformity. At this stage of the case there is often no distortion of the spinal column to make clear the diagnosis, but it is a period when sound principles of treatment are quite sure to obtain satisfactory results. It is now that the cast is likely to prove most beneficial by limiting the movements of the vertebrae, and that the so-called constitutional treatment avails something by getting the system into the best possible condition.

In addition to the exhibition of the

salts of iron and lime and of the bitter tonics *per os*, I have constantly resorted to the use of quinia and morphia by inunctions with the most happy success in obtaining their antiperiodic and quieting effects. That opium and its alkaloids are of great use in preventing the retrograde changes incident to this disease has been shown by the uniform success with which they have been used by adults. The aliptic art is almost forgotten in modern therapy, but if any practitioner, skeptical of its value in the management of diseases which fret and worry away the peace of children, will take the trouble to rub into the skin of a child 3 years old, restless and peevish with Pott's disease, a drachm of good, clean ointment containing one-eighth of a grain of oleate of morphia, every night before retiring, he will satisfy himself of a very good remedy and find an explanation of the praises sung of the aliptar by the Greeks and Romans. The rubbing of the skin with the smooth hand conduces to sleep by inhibiting the irritability of the peripheral nerves. The aliptic method of using remedies to improve the general tone of the system and an apparatus which by the facility with which it may be removed and replaced, favors most this method is the most rational and the most neglected means of treating one of the most painful and fatal diseases of childhood. Contrast it with the treatment by fixed apparatus and the absurd attempts at removal of deformity by constant extension. By the former method you may see the development of compensatory curves with which the child grows out of his disease and deformity; by the latter you see him grow septicæmic and die.

Treatment of Erectile Tumors in Children.

After unsatisfactory experience in the treatment of erectile tumors in children by means of vaccination, thermocauterization, and cauterization with the Vienna paste, Dr. DE SAINT GERMAIN recommends as the most satisfactory the injection of the tumors with Piazza's solution. This consists of chlorinated soda, fifteen parts, liquor ferri sesquichloridi (thirty per cent.), twenty parts, and water, sixty parts. Through this injection a coagulum of the blood in the tumor is produced, and the growth shrivels up. It is necessary to be careful that none of the injection enters the normal tissue, or violent inflammation will be produced. Occasionally, however, this method of treatment will fail; resource must then be had to some caustic paste, or to the antiseptic excision of the tumor.—*Centralb. für Chirurgie.—Ib.*

Septic Pneumonia in Infants.

Dr. OSCAR SILBERMANN draws the following conclusions from an analysis of twelve cases of septic pneumonia occurring in infants: 1. The septic pneumonia of the new born and infants always originates with a tracheo-bronchitis, and is to be regarded as a catarrhal pneumonia, in many cases due to the presence of a foreign body. 2. It may be produced by inhalation of decomposed amniotic fluid or genital secretions, or through inhalation of infected air in cases of septic infection of the mother. 3. The septic pneumonia of the newborn frequently originates with disease of the pleura, but seldom with disease of other organs, in contradistinction to other septic processes in infants, which are usually associated with multiple points of origin. 4. The alveoli and bronchi of children dying from septic

pneumonia are always filled with masses of bacteria. 5. The blood in cases of septic pneumonia in infants shows a great increase in the white corpuscles, with breaking down and solution of the red blood disks. 6. Jaundice is a constant accompaniment of this disease. 7. The disease usually originates from one to two days after delivery. 8. The disease is always fatal, usually on the third or fourth day after birth. 9. The access of septic material to the lungs in the new-born is favored by insufficient closure of the glottis, and by the shortness of the main bronchi. 10. The wide distribution of the septic process in the lungs is due to active epithelial desquamation and the narrowness of the finest bronchi, as well as the feeble muscular apparatus of the respiratory organs of the new-born child.—*Deutsches Arch. f. Klin. Med.*—*Med. Times*.

Jaundice in New-born Infants.

HOFMEIER (*Zeitschrift für Geburtshilfe und Gynakologie*, B. VIII. H. 2).

The author does not agree altogether with the various theories concerning the hepatogenous or hematogenous origin of jaundice. According to his views they express too great confidence in unproven theories, or are one-sided in regard to individual phenomena and local processes. The following facts were ascertained by the author after an extensive series of investigations upon icteric children during the first ten days of life. There is a decided loss of weight during the first few days and a great increase of urea, uric acid infarcts, and albumen. A constant phenomenon is the excretion of a yellow coloring matter with the urine which varies in quantity with the intensity of the disease. Any impropriety as to the nourishment of the child is attended by

a corresponding loss of albumen. This loss is accompanied by a loss in the body-weight. The loss of albumen affects the albumen of the blood-plasma, and also the red blood corpuscles. The longer these processes last and the more intense their action, the greater the destruction of red corpuscles. There is also an active production of new corpuscles. Through the destruction of red corpuscles is a loss only in a physiological sense the discharged coloring matter of the bile represents one of the most essential physiological products of the coloring matter of the blood. In addition to this, with the beginning of the functions of the intestine as an organ of digestion, the secretion of bile is greatly increased and this is rich in pigment. There are, in addition, certain anatomical conditions which favor the passage of bile into the blood, the final result being the discoloration of the skin. In poorly nourished and poorly developed children this discoloration will continue for some time. The process is a pathological one in so far as the passage into the blood of bile, a substance foreign to it, is always pathological. It is physiological, in that the causes are founded in the physiological relations which subsist after birth. Few children are so favorably circumstanced immediately after birth, that they can contend successfully against the extraordinary demands made upon their organs for the first few days of life, solely by means of the nourishment which they get.

OBSTETRICS.

Rupture of the Uterus during Labor, with Autopsy.

Dr. C. W. DE LANNOY, (*Med. Times*).
Through the kindness of my friend and

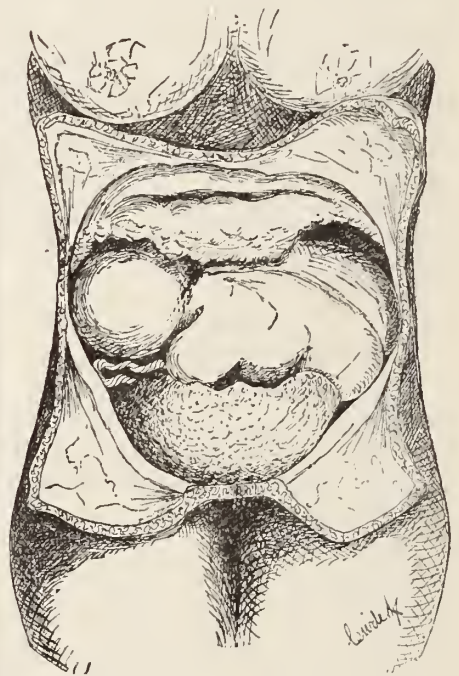
colleague Dr. J. L. Forwood, I assisted at the following autopsy, and obtained the history of this interesting case.

Mrs. X., an Irishwoman, about 43 years of age, who had been previously delivered without trouble of several healthy children, sent for him to attend her in labor. When he reached her house the labor had been in progress several hours, and at the time firm and periodical contractions indicated that the uterus was normally active and promised speedy expulsion of its contents. A digital examination, which was made immediately, revealed a breech presentation, with only partial dilatation of the os. No pressing interference being deemed necessary, the patient was made as comfortable as possible, and, under the continuance of active uterine contractions, dilatation of the neck was waited for. At the end of four hours from the beginning of labor the os seemed to be sufficiently open to admit the presenting part, but the latter had not as yet engaged in the superior strait. Suddenly, on the occurrence of a pain, the face of the woman assumed an anxious expression, the countenance indicating impending dissolution, and as the hand was passed into the vagina a foot was felt to recede, as if drawn up by powerful suction. No external hemorrhage took place, and, although periodical uterine or possibly purely abdominal contractions continued, she perished within half an hour after the accident.

Autopsy.—The body was that of an unusually fleshy woman, with an enormously tumid abdomen. Percussion elicited a marked impression of solidity, but afforded no signs of a double pregnancy; the greatest abdominal diameter was from side to side, and the protrusion of the lateral regions was extraordinary. Making the prescribed

crucial incisions, we found the abdominal walls unduly thin, and devoid of adipose, so abundant elsewhere. The child, with its back to the front and head to the right, occupied the entire transverse diameter of the abdomen (see Fig. 1), the left posterior axillary terminus falling beneath the umbilicus of the mother; the right side of the foetal head and back were covered by the omentum, and the buttocks were

Fig. 1.

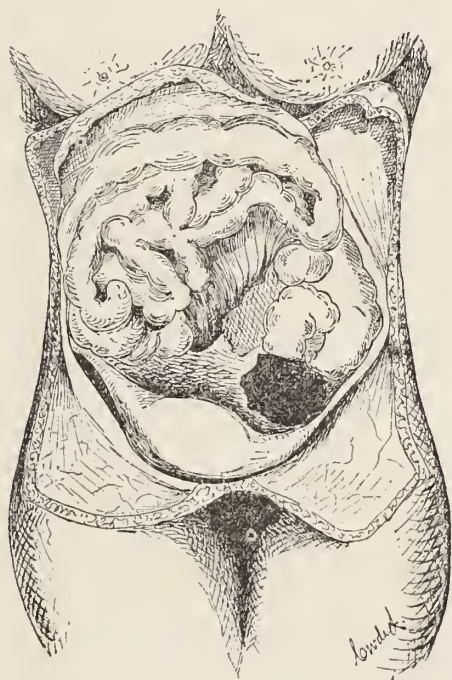


Position of foetus and placenta after rupture of the uterus.

thrust into the upper part of the left maternal groin. Below the foetus, and between it and the symphysis pubis, was the placenta, occupying a central position, with its maternal surface in contact with the parietal peritoneum. The umbilical cord was visible between the left ear of the foetus and the upper placental margin. After taking the sketch (Fig. 1), we removed the placenta

and foetus, throwing up the omentum and transverse colon, which partially covered the latter. The concave foetal surface of the placenta fitted like a cap over the fundus of the womb, which was in a position of extreme ante flexion and slightly inclined to the right; then, dragging the buttocks of the child from the left iliac fossa, we found the feet still buried in the large peritoneal laceration represented (Fig. 2). The small

Fig. 2.



Peritoneal laceration. Case of rupture of the uterus.

intestines were all crowded up into the right hypochondrium, apparently retained there by the foetal head; they contained little or no gas, far less than is ordinarily met with in average autopsies. The abdomen contained about one quart of blood, with but few clots, of small size. The pelvic diameters were normal, with a slightly exaggerated sacral prominence.

It must be assumed in this case that

rupture of the cervico-uterine walls was the result of combined causes. The foetus was extremely large, and must have weighed fourteen or fifteen pounds; it had evidently expired some days pre- to the onset of the labor; at least the advanced stage of putrefaction in which we found it could not be otherwise accounted for. We might reason from the above premises that a large, dense mass, exercising great pressure upon a disproportionately thin-walled cavity, would alone exert influences tending towards rupture; but when, in addition, we have the evil effects of putrefaction, which would bring about softening of the mucous membrane and muscular fibre of the womb, the probabilities of so serious an accident would become imminent. The transverse position of the foetus would lead one to infer that it had escaped into the peritoneal cavity head-foremost; and such was my opinion previous to consideration of the facts incident to her labor. The breech presented at the mouth of the womb, and a foot was felt in the vagina immediately after rupture was supposed to have taken place. The rent in the walls of the womb was situated at the junction of neck and body, involving both of these parts. The foetal head at the time of rupture still occupied the fundus of the womb, and could not have found egress through an opening situated low down at the brim of the pelvis. It will be further noticed, by referring to Fig. 2, that while it is in the course of nature for the uterus to contract down after voidance of its contents, per vaginam or otherwise, we have in this case an unusually marked disproportion between the sizes of foetus and contracted uterine tissue. The inference is that, like the abdominal parietes the uterine walls were unusually thin, and, although the peritoneal rent seems

small, it was no doubt a large one before its outline had narrowed down in obedience to uterine contraction. Further, the position of the fœtus in its extra-uterine habitat may have been influenced, determined, or even radically changed by the periodical contractions of the abdominal muscles subsequent to the rupture: this latter phenomenon was maintained for half an hour, the time which elapsed between the supposed occurrence of rupture and a fatal issue.

To sum up the etiological value of both clinical history and post-mortem appearances, it would seem that in this case the obstacles opposing the escape of the fœtus from the cavity of the uterus were, first, the walls of that cavity and, in the second place, the ordinary resistance of the uterine neck previous to complete dilatation; of the two the former proved least difficult to overcome and hence delivery by other than *per vias naturales*.

Rapid Delivery in Puerperal Eclampsia.

D. BARRETT, of St. Louis, reports a case of puerperal convulsions successfully treated by rapid delivery.

The report is of interest on account of the method of dilatation employed. Though the patient was *in extremis*, the os externum admitted only a single finger. The woman was placed upon a table and the cervix exposed by means of a Sim's speculum. The os was then dilated by the use of a Sim's rectal dilator. This procedure consumed only ten minutes. In thirty minutes more the delivery was complete. Dr. B. considers the above method vastly superior in point of facility and certainty to the use of the Barnes or Molesworth instrument.

Apropos of this case it may be remarked that prompt delivery is unquestionably an important element in the

treatment of ante partum eclampsia. Under chloroform to full anæsthesia the danger of aggravating the convulsions by forced delivery is practically *nil*. More time will usually be required, however, than in Dr. B.'s case. For it should not be forgotten that nature's method of dilatation is largely a physiological relaxation of the cervix. The attempt, therefore, to substitute a purely mechanical process is by no means free from danger in all cases. Laceration and other injuries to the cervix and surrounding structures may result from undue violence. The proper function of an instrumental dilator is only in part mechanical. It acts also as a reflex excitor of expulsive pains, and a healthy cervix rarely fails to dilate promptly in the presence of normal pains. Again, it probably acts directly, by its mere presence, to promote relaxation of the cervix.

While, therefore, the more powerful instrument has the advantage of greater celerity, the Barnes' far better meets the natural indications. The chief disadvantage of the Barnes' dilator is the difficulty of placing and retaining it. The use of Sims' speculum as practiced by Dr. Barrett, would in great measure obviate this difficulty. The many valuable offices of the Sims' speculum in obstetrics, by the way, were first suggested by Dr. Skene. C. J.

Pulverized Vaccine Matter.

An important discovery by Dr. REISNER promises to do away with all scarcity of vaccine matter in the future. It offers few difficulties, and every country physician can provide himself with a practically unlimited quantity of the purest animal vaccine virus, at a nominal expense.—*Med. & Surg. Rep.*

DISEASES OF WOMEN.

A Successful Case of Total Extirpation of the Uterus through the Vagina.

We abstract the following article by Dr. AUGUSTUS C. BERNAYS from *St. Louis Med. & Surg. Journal*.* Mrs. P.—, from Texarkana, æt. 52, no hereditary incumbrance, has always been rather weak, had a great deal of trouble during her life with her family, menstruation commenced at 14, has always been regular, has had four children, all boys and one miscarriage. Suffered a great deal of pain in back and hips and was thought to have ulceration of the cervix. During the year 1883 she lost strength continually, was always under treatment in the country, until finally one of our Professors of Gynecology, who has a clinic, told her that she had cancer of the womb and he could do nothing for her. She first came to my office Dec. 6th, 1883 and on examination revealed the presence of an epithelioma of the vaginal portion of the uterus. The tumor was hard and well defined and surrounded the os, in the shape of a horse shoe, upon the left side, leaving a small margin at the right angle of the os entirely free. A narrow strip of the mucous membrane of the vaginal vault upon the left side was also ulcerated and in connection with the tumor surrounding the os. The cavity of the uterus proved of normal length, the position and mobility of this organ were also normal. The parametria and surrounding tissue were found intact.

I operated on Dec. 12th, 1883.

The preparations for the operation were of a simple nature, I had the vagina thoroughly cleansed the evening previous to the morning of the operation, by

injections with water. Whenever I say cleansed or use the expression clean, I mean all that can be covered by the widest extension of the word, I do not mean the use of so-called antiseptic solution or drugs. Many of the latter are anything but clean, and cannot even be said to cleanse the parts upon which they are used, on the contrary they are often very unclean and poisonous. I always clean the vagina after using caustics, styptics and antiseptics with water. Since I have seen that one, two or three per cent. solutions of carbolic acid are splendid fluids where in to breed and propagate colonies of bacteria I have ceased to use them in my operations and really I have found in numerous capital surgical operations that clean water is the best wash for wounds as well as the cleanest dressing. On the evening previous a pint of an effervescent solution of citrate of magnesia was administered, and after the passage, the rectum was also cleansed by the use of pure water injections. Internally I have always found it a wise precaution, since my residence in the Mississippi Valley, to administer thirty grains of sulphate of quinine the day before an operation, I combine this with chlorate of potash in capsules in all cases involving an opening of the abdominal cavity where it is desirable to have the bowels somewhat contracted. The patient was placed on her back with hips flexed upon the abdomen in Sim's overdone lithotomy position, one assistant holding each leg in this position. A broad flat Sini's speculum was introduced for the purpose of holding down the perineum and compressing the lower part of the rectum. It is important that this blade be rather short so that it will not interfere with the downward traction to be made upon the uterus. This speculum is entrusted to a third assistant, seated on a stool to my left, and if possi-

* We are indebted to the "St. Louis Medical & Surg. Journal" for loan of the Cuts of this Article.

ble remains in position during the entire operation. The lateral and anterior walls are held wide apart by broad vaginal retractors and, after a catheter has been introduced into the bladder and one into the rectum which may become very useful guides, we are ready to begin the operation. I began by first grasping the vaginal portion with a volsellum forceps and forcibly drawing it outwards and to the right, thereby stretching the left lateral vault of the vagina, and with it to a great extent the left parametrium, in a transverse direction; I now made a small incision, merely through the mucous membrane, near the middle of this tense mass of tissue a little toward the bladder, through this puncture I forced an aneurysm needle, armed with a very heavy double silk ligature, in such a manner upwards and backwards, that I was bound to surround about one inch of the parametran tissue along the side of the uterus. I then forced the blunt point of the instrument down and outward until it formed a prominence under the mucous membrane of the vagina, opposite the point of entrance but about three-fourths of an inch distance towards the rectum, cutting down upon the point it was immediately projected and the ligature caught by a tenaculum, after which the curved aneurysm needle was withdrawn, re-threaded and the same proceeding performed on the right parametrium.

These ligatures embraced the lateral portions of the fornix of the vagina and as much of the parametrium as I could possibly reach, perhaps even a portion of the broad ligament proper. My intention was to grasp the uterine arteries in this ligature and thus obviate the principle sources of hæmorrhage that we must encounter.

MIKULICZ advised and used a superficial ligature, somewhat similar on both

sides, for the purpose of using them as loops with which to draw down the uterus. My ligatures had an entirely different purpose and were placed *without the area of the tissue to be extirpated*, far enough away from the cancerous tissue to avoid the danger of cutting them during the next steps. MIKULICZ's ligatures were placed near the uterus and were within the area to be cut away; next I firmly tied one of my threads on each side, intending, if necessary, to use the loose ones as loops to draw down the parametria at a later stage, if this should be found expedient. I now proceeded to make a nearly circular incision through the fornix of the vagina around the neck of the womb and well within my *prophylactic ligatures*. There was very little bleeding indeed and I continued to dissect up around the neck of the womb, carefully working upwards between the bladder and uterus in front and between the rectum and uterus behind. By placing the narrow blade of the knife flat upon the womb and sticking close to it, this circumcision can be very safely and rapidly done, with little danger of cutting into the bladder, until we are high enough upwards to open the peritoneal cavity. We are made aware of any opening into the abdomen by the slightly whizzing sound of entering air, or, as in my case by, the escape of a little serum. I took up a probe pointed knife and under guidance of my finger finished the circumcision of the peritoneum around the body of the uterus, thus far hardly an ounce of blood was lost and I had every reason to be satisfied with my primary ligatures, as they had entirely obviated the necessity of applying any ligatures to stop hæmorrhage.

I now introduced my index finger, of the left hand, into the anterior *cul de sac* and, under its guidance, slipped a Lan-

genbeck's blunt retractor over the fundus of the uterus and now, withdrawing my finger, I held the os uteri with a vulsellum in my left hand and the fundus with a retractor in my right. By allowing the neck to go upwards with my left hand, I readily succeeded in doubling the organ upon itself and drawing the fundus with its attachments into the vagina, through the anterior *cul de sac* I grasped the fundus, with a one-pronged Hegar's womb-holder and drawing it first to one side I passed a

being carefully done on both sides, I cut off the womb, well within the ligatures, in such a manner that they had sufficient peripheral tissue to prevent their becoming loosened too soon.

On examination the womb is now found to be quite loose and only held or swung, as it were, on the axis of parametran tissue, which is left between the gap cut into the broad ligament from above and the incision, or rather circumcision, which started from the neck. By pulling the womb first to one

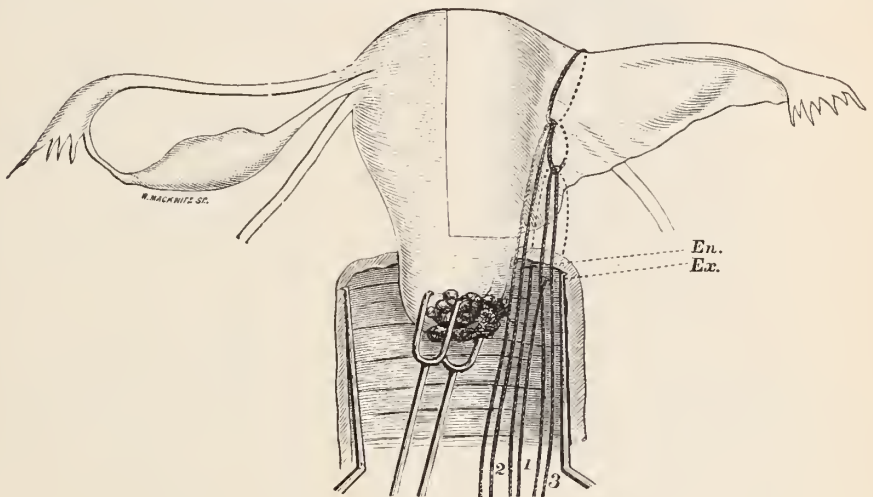


FIG. 21.

Fig. 21.—Shows the Epithelioma at the Os; the Vagina dilated, the womb pulled down by a vulsellum. The three ligatures are numbered in the order of their application. En, is the point of entrance of my prophylactic ligature, Ex, its point of exit. The dotted line shows the amount of tissue which it encompasses. The other ligatures are represented loosely drawn together in the diagram.

handled needle with a double ligature, along the side of the body of the womb, in such a manner that I could pierce the broad ligament below the point where it covers the ligamentum rotundum. Again, catching the thread with a tenaculum, the needle was withdrawn and the ligatures fastened in such a manner that it firmly included the fallopian tube, the ovarian artery, the round ligament, in fact everything contained in the fold of the broad ligament. This

side and then to the other, a ligature is quickly thrown around this mass of tissue on both sides with the aneurism needle and these remnants firmly tied. All that was left to do now was to cut through these tissues, close to the body of the womb, when it fell out of the vagina with the vulsellum and Hegar's womb-holder attached; I now cleansed the field of operation with warm water, drew the six ligatures together in a bunch and performed the toilet of the

pelvic cavity. There was some little insignificant bleeding from an unknown source which ceased after a few sponges had been introduced. Water, which was allowed to run through the vagina from an irrigator, returned perfectly clear. An examination with my finger

trust that any secretions of the wound might be let outwards or drain, as it were, along the thick silk threads, into the vagina where they could be readily removed. I believe also that in this way I could secure the best physiological as well as mechanical rest to the parts

and would not be obliged to remove sutures on the fifth or sixth day. I therefore, without placing any tampon of cotton or any drainage arrangement whatever into the vagina, had the patient carried to her bed and an injection of morphine administered. My orders to the nurse were no nourishment at all for 24 hours and only a little chopped ice to allay thirst. The temperature of the patient at no time during the healing process reached 100° with the exception of one afternoon during the sixth day, when she had a chill followed by a temperature of 104°, that lasted about three hours. The house physician sent for me hastily that day, but an examination showed nothing particularly alarming, about one half teaspoonful of slightly bloody matter was

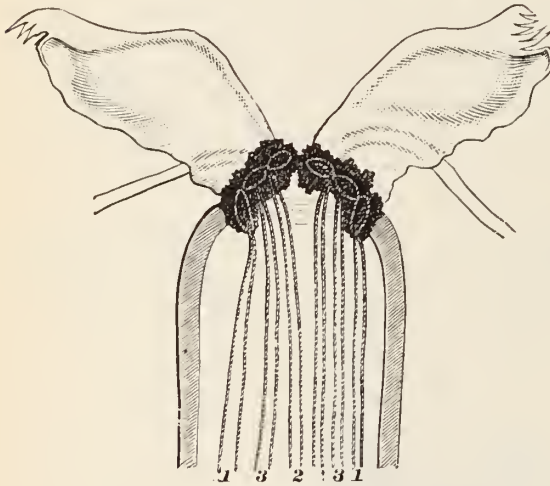


FIG. 22.

Fig. 22.—Shows the vault of the vagina partly closed by the stumps of the parametria or the broad ligaments. The three ligatures are all well tied and the ends hang down into the vagina. The Fallopian tubes and the broad ligaments are seen to come together and partly fill up the space which was left by the removal of the uterus. It becomes apparent that the small opening left in the peritoneal cavity between the ligated parametria will be obturated by a kind of valvular closure between anterior and posterior flaps of the vaginal fornix, and this kept *in situ* by the involuntary abdominal press.

convinced me that the fornix of the vagina was well contracted, there was no tendency to prolapse of the bowels, and by very slightly drawing on the six ligatures the vault of the vagina was almost closed by the stumps of the broad ligament, which were drawn down to a small knot on each side by the three ligatures.

Not knowing exactly what process of healing would ensue, I determined to simply leave the wound open, apply no sutures, either to the peritoneum or to the vaginal mucous membrane, but to

found in the cavity of Sims speculum. During five days the water, used for injections, always returned slightly reddened to the bedpan but was not in the least offensive in smell. These injections were made three times daily and once about midnight. After this period there was a slight purulent discharge and about the eighth day it became slightly offensive. About this time, also, a tender spot, in the right ovarian region, the size of a hens eggs, developed, which remained for ten days and then gradually disappeared. During this period the

pulse ranged from 100-120 beats, but as the patient had some old heart trouble, traceable to an attack of articular rheumatism during her youth, no conclusions could be drawn therefrom. On the 16th day the first ligature came away, its loop was found to be about the size of a small lead pencil, the others gradually came away by the injections, which were reduced to only two per day, after the third week. The secretions now became very thick and of a yellow color. The patient left her bed, for the first time, on the 28th day, she gradually improved in looks, her appetite came back and she gained considerably in weight and left the hospital rejoicing on March the 13th. The vagina had completely closed up, there was no secretion at all, as there was no wound. The vagina ended in a blind sack, like the finger of a glove, and there was no hardness to be felt anywhere.

Dysmenorrhœa.

Dr. JAMES EGAN (*Med. World*): Dysmenorrhœa indicates pain or difficulty, conjointly or severally, incident to the performance of menstruation. There is great variation in the severity of the suffering; pain can only be estimated by the ability of the individual to endure it; therefore is a relative term. In all cases pain is felt in the uterus; there may be ovarian and other pains, but the pain, diagnostic of the ailment, is fixed in the uterus.

Dysmenorrhœa is not a disease *per se*, but is merely a symptomatic condition and points to some functional or organic disease of the uterus or ovaries. Successful treatment demands in each case a careful examination and remedies adapted to the condition existing.

The uterus and ovaries being essential to menstruation, their healthy condition is a necessity to a proper per-

formance of the function. Any disturbance of either or both of these organs may produce pain during the period. For this reason we classify the disease as *ovarian* or *uterine*, so as to distinguish the causative organ. This is an arbitrary classification, but a convenient one. Cases glide closely into one another; are rarely simple and typical; and frequently so mixed and intimately related that a scientific division is useless.

Dysmenorrhœa is a neurosis; and in its simple form, where it is best studied, is a hyperæsthesia of the reproductive organs, or one or other of them. There is a disturbance of the whole nervous system. We find the blood loaded with bile acids; the surplus albumenoids are not disintegrated and converted into soluble urinary compounds and excreted by the kidneys. The urine is surcharged with urea, lithic acid, lithate of ammonia and other products. In many cases we find that in the interval between the periods complaints are made of migratory neuralgic pains. When there is an excess of bile acids circulating in the blood, the nerves are unable to draw healthy pabulum from the capillaries and irritability is the consequence.

In a certain number of cases this irritability of nerve is confined to the uterus. In other cases, and these are the most severe, both ovaries and uterus are affected. Dysmenorrhœal pain is the cry of the nerve for food; its starved condition renders it hyperæsthetic.

Sooner or later dysmenorrhœa produces hypertrophy of the uterus, erosion, eversion and catarrh of the mucous membrane of the cervix.

Ovarian Dysmenorrhœa.—There is no difficulty in diagnosing this variety of the disease. When the flow precedes the pain, which is continuous during the menstrual period, we may consider

the case ovarian in its origin. The pain is felt deep down behind one or both groins and extends down the thigh; it may also be traced to the loins. In some persons the pain does not appear until from 24 to 36 hours after the appearance of the flow. The pain and nervous disturbance is often so great as to produce delirium, convulsions and opisthotonos. Nausea and vomiting are concomitants produced by reflex irritation. The menorrhagic form is that which is symptomatic of ovarian disturbance, and is present in about two-fifths of all cases of dysmenorrhœa.

There may be either functional (irritability) or organic disease of the ovary. Pressure upon the site of the organ will develop a sharp, stinging pain; other points of pain will be felt under the breast and at the base of the scapula. Sometimes, owing to uterine displacement, the ovary is dislocated and bound down by adhesions to neighboring parts. There is a peculiar glitter or sheen in the eye when there is ovarian trouble, and this, when recognized, will point out the offending cause. The effect of ovarian irritation is reflected upon every organ of the body; so much so that persistent functional disturbance of other organs, unrelieved by ordinary remedies, should direct attention to the ovary as a probable cause.

Ovarian disease produces in some cases such severe mental and nervous disturbance, together with excruciating dysmenorrhœal pain, as to render Battey's or Lawson Tait's operation necessary for the preservation of mind and life, or render the latter bearable. In such cases there may be continuous pain highly aggravated at the menstrual period, or there may be pain a few days previous to and succeeding the flow and intensified during its continuance.

In ovarian dysmenorrhœa from an

irritable ovary, pain will be superinduced in the uterus from reflected irritation; but when there is organic ovarian disease the vascular turgescence of the womb is kept up continuously and persistently, and a chronic congested condition of the mucous membrane of the body of the womb is the result. In ovarian dysmenorrhœa one period may be passed in extreme pain while one or more successive periods may glide by with entire freedom from pain. In such cases one ovary is diseased while the other is healthy; and in the periods free from pain the sound ovary is concerned in menstruation. The subjects of this form of the disease at the outset are generally strong, of full habit, and complain of headache, vertigo, imperfect vision, etc., previous to the period; but continued suffering produces habitual ill health and extreme nervousness.

Treatment.—Dysmenorrhœa being a neurosis and only a symptom of ill health, we have the usual complications of such a condition. It is best to deal with these troubles during the intermenstrual period and then we have to treat the affection at the period in its simplest form. In this paper it is impracticable to generalize; each case must be a law unto itself.

For ovarian dysmenorrhœa, Dr. N. S. Davis, of Chicago, recommends that patients place themselves in the knee and chest position three or four times daily for a few minutes, and in conjunction prescribes: \mathcal{R} Ammon. hydrochlor., \mathfrak{z} iij.; tr. stramonii, \mathfrak{z} ss.; tr. cimicifugæ rad, \mathfrak{z} iss; syr. glycyrrhizæ, \mathfrak{z} ij. M. Sig.—A teaspoonful 3 times daily.

Dr. William Goodell uses the following combination: \mathcal{R} Zinzi valerianatis, quinîæ valerianatis, ferri valerianatis, $\mathfrak{a}\mathfrak{a}$ gr. xx. M. et div. in pil. no. xx. Sig.—One three times a day.

The *Virginia Medical Monthly* recommends: \mathcal{R} Codeiæ sulph., gr. i.; chloral hydrate, ammonii bromidi, \mathfrak{aa} gr. xx.; aquæ camphræ, \mathfrak{z} i. M. Sig.—For one dose. Take at bed time.

Electricity holds a high place in the cure of ovarian dysmenorrhœa. One pole may be applied to the hypogastrium and lumbar spine, and the other, through a suitable rheophore, to the ovary, which can be reached near enough by pushing the instrument well up on either side of the cervix. There is no doubt that electricity is a potent remedy for the relief of pain, and in addition has a beneficial stimulating influence. We believe that such remedial measures are not warranted until constitutional treatment has been tried and found useless.

For the relief of the pain during the period various anodynes and nervous sedatives have been used. Dr. Fordyce Parker extols apiol administered in capsular form. Opium, morphia, codeia and svapnia have all been prescribed advantageously. Chloroform and ether are still more positive in effects.

During the intermenstrual period we consider the bromides are the most efficient remedies. They may be alternated and given in five grain doses three or four times daily in the form of an elixir. With the bromides may be combined Hayden's viburnum compound in teaspoonful doses in hot water or milk three or four times daily. This is a safe and reliable preparation which has been tested by physicians for the past twenty years with more satisfaction to them and their patients than any one or all other remedies in the materia medica for dysmenorrhœa and other functional diseases of women. I extract from the *Medical Summary* of March, 1884: "Hayden's viburnum compound is a valuable remedy in dysmenorrhœa, amen-

orrhœa, menorrhagia and internal pains of the stomach and bowels, where an antispasmodic, nervine and tonic is indicated. It relieves and soothes without narcotizing or stupefying or leaving any unpleasant sequelæ. Containing no opium or other narcotic, an overdose is harmless. Drs. Hale, Piffard and Purdy have highly recommended the viburnums; but the beneficial results obtained from Hayden's formula cannot be derived from the viburnums in their simple form. At a medical meeting in New York a prominent physician spoke of Hayden's viburnum compound in terms so strong as to surprise the meeting."

Thapsia plaster applied over the diseased ovary will be found advantageous. It answers the purpose better than the fly blister and is free from the disadvantage of the latter.

The subjects of ovarian dysmenorrhœa are generally sterile.

[There is much that is true and useful in the above article on dysmenorrhœa, and yet there are some statements that might be modified with advantage.

The pain of ovarian dysmenorrhœa often begins for days before the menstrual flow according to our observations. Again, the pain and other symptoms given under the head of ovarian dysmenorrhœa may mainly all arise from disease of the body of the uterus. On the whole, this paper is a little too exclusively devoted to the neurotic element in dysmenorrhœa. While the facts are that the nerve element in some forms of dysmenorrhœa is secondary to other pathological conditions of the uterus and ovaries.

The use of opium, chloral and codeia, should be avoided, if possible, in dysmenorrhœa. Their use is never curative, and tend strongly to demoralize such subjects.

Hayden's viburnum compound has not yet won the reputation given to it in this paper.]

A. J. C. S.

Simultaneous Operations for Lacerations of Cervix Uteri and Perineum.

These operations are now frequently performed at one sitting. Experience has demonstrated the perfect safety of the plan, and the advantages to the patient are obvious. Dr. JANVRIN of New York reports a series of fifteen successful cases of the double operation in the April ('84) number of the *American Journal of Obstetrics*. As Dr. Janvrin remarks, an hour and a half usually suffices for the completion of both operations, and this is usually quite a safe duration of etherization. In a recent instance, I completed both operations in one hour and twenty minutes. The perineal sutures are removed on the eighth day, and the cervical on the eighteenth or twentieth. With care this can be done in a good light with a long narrow-bladed Sim's speculum without danger to the integrity of the newly-formed perineum.—*Can. Lancet*.

[We have simultaneously restored the cervix uteri and perineum more than thirty times and with gratifying results. The time required for both operations was a little less than that given by Dr. Janvrin, an hour the longest and in the majority of the cases less.

Japanese thread made from whale tendon, was used for sutures in restoring the cervix. The advantage in this being that the sutures disappear thus obviating all necessity for their removal.]

A. J. C. S.

The Hygiene of the Sexual Organs.

Prof. THEOPHALUS PARVIN, A. M., M. D.: This lecture in the *Atlanta Jour. of Med.* was delivered before the

class, and "published at the earnest request of many of the students of Jefferson College."

We have not the space to give the lecture in full, nor have we any desire to do so, for the reason that it is of doubtful value.

In the first place there is very little in the lecture that pertains to the hygiene of the sexual functions; it is rather a historical record of the brutal perversion of the sexual function in various periods of the world's history, and among different races of men. This resurrection of many vile habits which we had hoped were dead, buried and forgotten, can surely serve no good purpose. This kind of moralizing on the disgusting facts in the history of the past, has about the same effect as the moral teaching of the old lady, who, when she left her children for a time alone, told them they might do anything they pleased except to put beans up their noses, and although none of her young ones ever heard of the procedure before, on her return she found their noses full of beans.

The lecture is a very extraordinary one we must admit, as showing great research and learning as well as a remarkable memory on the part of the lecturer, but we doubt whether the hygiene of the sexual organs in this age can be improved by rehearsing the vile habits of the ancients to a class of medical students. In the brief portion of the lecture devoted to the subject under discussion, there is really nothing new or of much interest. We hope, at least, that this is so, because we believe that every student of medicine has sufficient intelligence to know that the abuse of the sexual organs is injurious and unrighteous, and that abstinence is infinitely to be preferred to illegitimate indulgence. We are not positively sure,

but inclined to think that if this lecture should be published in pamphlet form and circulated about the country, the authorities would feel themselves called upon to suppress it along with other obscene literature.

Amenorrhœa and a New Remedy Therefor.

Dr. J. MATTHEWS DUNCAN, of St. Bartholomew's, London, has recently been delivering a course of lectures on the subject of amenorrhœa, from which we glean certain statements which are, to say the least, sufficiently novel to attract attention. He is not inclined to regard amenorrhœa as the grave disease which our forefathers held it to be, or which it is, indeed, held to be by very many contemporaries. It may be doubted, he says, whether it is ever more than a negative symptom. Certainly, except, perhaps, in exceptional cases, it should be regarded neither as a disease nor even a disorder. Often, as in wasting diseases, it is a beneficial arrangement, saving for the sufferer a considerable amount of energy and of blood. He holds that there are many delicate women whose health would be very much improved in every way if they had amenorrhœa, and some modern enthusiasts would recommend for such women the operation of spaying. Many cases of so-called dysmenorrhœa are simply cases of ill health induced by menstruation. A weak girl has no energy to spare even for the normal process, and when the time for her menses comes she gets alarmed, dark areas surround her eyes, her back aches and she is a patient; not, as she ought to be, a vigorous blooming woman, fit to endure menstruation and also fit to go successfully through the dangerous processes of pregnancy, parturition and suckling.

Two sets of cases occur where the amenorrhœa is probably morbid: 1st. In healthy, robust women who have for years menstruated regularly, and perhaps even borne a small number of children, and who now, while still young, do not menstruate. Such cases of annihilation of at least the visible parts of this process, and probably also of the ovular or invisible part, seem no more than an arrest of a function which is justly expected to go on regularly in healthy women; it is due to sluggishness of the whole genital system. The other class comprises those cases of bad health, and especially of anæmia or chlorosis, where the disorder is probably in some nervous genital center, and whose chief manifest result is amenorrhœa. Anæmia or chlorosis, from any cause may induce amenorrhœa, but there is a large class of cases where chlorosis seems not to be the cause of amenorrhœa, but probably the result of it, or rather of that derangement of the nervous system which is evinced by the amenorrhœa and chlorosis.

The commonest form of amenorrhœa is that of young girls still in their teens, or only lately passed them, with chlorosis or green sickness as well as cessation of menstruation, and whatever may be the true theory of such cases, in practice they are regarded and treated simply as cases of chlorosis. The condition is very frequent among girls brought from the country to boarding schools and towns, or to domestic service; both modes of life requiring large amount of work with a deficiency of open fresh air and bodily exercise. In whatever manner produced the disease in these cases is of great importance, leading, as it sometimes does, to disease of the heart, to renal disease or phthisis pulmonalis. Of quite another pathology are cases of what is called suppression

of menstruation. This has nothing to do with anæmia or chlorosis, but rather with morbid congestion or inflammation of the internal genital organs. A girl in the early days of menstruation, or in the days immediately preceding, is exposed to cold, or it may be has had wet and cold feet. The flow of menstruation is quickly and prematurely arrested or does not come on. There is more or less pain in the lower belly and sacrum. There may be more or less fever. Such cases are managed and treated as cases of more or less grave inflammation. They should be confined to bed. The hypogastrium should be poulticed, and laxatives and diaphoretics administered. Free loss of blood by menstruation is desirable in these cases and the poulticing may favor it; or if it does not come, three or four leeches may be applied to the perineum. When the next molimen menstruale shows itself great care is to be taken to encourage the appearance of the menstruation and copious flow by rest and warmth. The aim of treatment in amenorrhœa by suppression is to moderate or diminish congestion. In ordinary amenorrhœa from uterine sluggishness or from chlorosis, the aim is to stimulate the generative organs, to produce or create congestion. Cases of this latter kind may be completely amenorrhœal or the menstruation may be scanty, or instead of bloody discharge there may be only temporarily increased mucuous discharges (whites). There may be a molimen or it may be absent.

Dr. Duncan then considers briefly the remedies which have been recommended in amenorrhœa. When there is a molimen he prefers the pediluvium to the full bath or the hip bath. In addition to this, while the molimen lasts some stimulant may be given, and of the many in use he prefers the oil of penny-

royal, a drop dose in some vehicle several times a day. When there is no molimen he knows of no direct remedy which acts as an emmenagogue. In such cases savin or cantharides in large doses, the most powerful of so called emmenagogues, may no doubt cause blood to flow from the womb, but this is not only a caricature of menstruation but it is also an unmixed injury to the woman. The same medicines given to man may cause strangury and hæmaturia. But that is not menstruation any more than is the flow of blood following their use in woman.

Having declared that there is really no emmenagogue action attached to any drug of which we have any knowledge, Dr. Duncan mentions the only truly emmenagogue medicine with which he is familiar. It is not to be found in the pharmacopœia. It is erotic excitement. Of the value of erotic excitement he has no doubt, but it is only in a modified and carefully considered way that it can be used immediately. There are many points at which medicine and morals come into contact, and their consideration is most important. A long lecture might with great advantage be given describing the mutual relations of the one to the other, and especially with a view to the present subject—the therapeutic power of morals in medicine and the therapeutic power of medicine in morals. The inducement of this erotic excitement, if it is to be induced at all, must be at the wisdom and discretion of the practitioner, who must be the judge of the extent to which it may be advisable to allow the therapeutic properties of this condition to trench on its moral aspects. Few physicians, we take it, will be prepared to take the responsibility of advising it as a therapeutic measure.—*Med Age.*

DISEASES OF CHILDREN.

Acute Meningitis in Children.

Dr. WM. T. PLANT (*Obst. Gazette*):

You are called to see a child between one and seven or eight years old; for this malady like many others, is rather infrequent during the first year and after the eighth or tenth year, there is greater liability to pulmonary phthisis than to meningitis. Perhaps the parents may have noticed that for some weeks or months the child has been losing appetite, weight and color; that it has been easily fatigued and easily fretted, and that it has been inclined to sadness and drowsiness. More than likely, however, these prodromal symptoms, if present at all, have not been sufficiently marked to attract notice. The patient does not strike you as being very ill, but it has lost its usual animation and sprightliness. It finds little amusement in its toys. If old enough it may complain of headache; if not so old it may manifest its discomfort by occasionally carrying its hand to its head. Sometimes the headache is so severe, even in these early days, as to force an occasional cry from the child. It is apt to reel in walking, and it may be observed sometimes to come to a sudden pause and look around as if frightened or bewildered. If lying down it may cry out that it is falling and beg to be taken up. These symptoms are doubtless due to vertigo. It inclines to drowsiness through the day, and may lie for hours when the room is quiet and darkened in a half-sleeping state. It is petulant if disturbed, and when questioned replies in monosyllables, if, indeed, it replies at all. Its very silence is ominous of the coming storm. It prefers darkness, or at least twilight to light, instinctively

turning its face away from the bright lamp or uncurtained window. Often, the eyes are of an unnatural brightness and the pupils contracted. The hearing also may be so acute that loud noises are very distressing. The temperature is somewhat raised; the pulse is probably increased in frequency and the appetite is impaired, if not lost. Constipation is an early symptom commonly attending the whole course of the disease, excepting, possibly, the last days. It is apt to be obstinate, requiring a cathartic or a clyster for every movement. In a few instances meningitis has been known to begin with a flux, but this is of short duration and is followed by constipation.

Another early and rather persistent symptom is vomiting. Though it is not in most cases very often repeated, it may be so frequent as to seriously interfere with nutrition. It does not usually attend the latter part of the disease, and is often absent after the third or fourth day. I would have you note the fact that vomiting is not present in every case, as has been asserted by some writers. Barrier found it absent in about one-fifth of the cases observed by him, and I have seen several in which it was altogether wanting.

Though the temperature of the body is somewhat increased, the face is commonly paler than natural. Now and again red spots appear on the cheeks, forehead or ears, to fade away after an uncertain time; or streaks of redness move across the pale features as fleecy clouds move over the face of the moon.

The mental faculties are not usually disturbed until the disease has made considerable progress.

In most cases certain retinal changes observed by the ophthalmoscope will help to establish an early diagnosis. These are hyperæmia and œdema of the optic

papillæ; tortuous and gorged retinal veins; and the appearance characteristic of optic neuritis.

Such are the ordinary initial symptoms of tubercular meningitis. Not all of them are present in every case and no one of them is specially characteristic. Many times the mistake has been made of pronouncing it remittent or typhoid fever. But before the week has passed the symptoms have become so characteristic as to compel a correction of the diagnosis if previously in error. The inflammation is now under full headway. The headache increases. Children who are old enough often cry out, "Oh, my head! my head! Sometimes the pain is referred to the back of the head or to the ears, and sometimes, curiously enough, to the abdomen. Many writers have alluded to a retraction of the abdomen as one of the symptoms, but it is not, I am sure, always present.

Some patients utter a peculiar, solitary cry or squeal that is so characteristic as to have received the name of "meningitic cry." It seems to me to be denotive of sudden darting pain in the head.

A singular phenomenon was, I think, first described by the great Trousseau and called by him the "*meningitique tache*." If you draw your fingers over the surface of a patient ill of this disease, a red mark often follows that lasts for several seconds and then fades. This symptom does not, however, belong exclusively to meningitis, nor is it present in every case, and it is not therefore, of very great diagnostic value. Whenever it is present it would suggest, like the alternating flush and palor, an irregular and aberrant action of the force governing the capillary blood supply.

The tendency to stupor and somnolence increases. In sleep the eyeballs

are often turned upwards and the pupil is hidden beneath the half-closed lids. There may also, by this time, be a squint of one or both eyes, and frequently the sight of one is larger than that of the other.

When awake the child is oblivious to its surroundings. At one time there may be a steady fixed gaze into vacancy and an obstinate silence, giving place, if disturbed, to a spiteful look and a petulant cry; at another, an active, garrulous delirium.

Both the pulse and respiration now present significant phenomena. The former is slow and irregular. A pulse that in health would run from eighty-five to a hundred may fall to seventy or lower. Often it is intermittent, and it may be regularly or irregularly so. A lack of uniformity as to strength is another characteristic; now strong and energetic in its beating, then suddenly becoming weak and flickering. You may now and then meet with a case where the pulse is not less frequent than usual, but only intermittent and unequal.

The breathing, too, is characterized by irregularity. Sometimes it ceases for a moment and then starts in with a hurried gasping as though the function was conscious of time lost. Sighing and yawning are common symptoms. These peculiarities of pulse and respiration are doubtless due to the fact that the roots of the pneumogastriacs are involved in the inflammation.

I have alluded to the squinting often witnessed at this period, but other muscles than those of the eyes are compelled to unwonted and distorting contraction. Muscular twitchings are very common and may be so severe as to interfere with sleep. A quiver may sometimes be observed to run over the whole body. Often there is a tonic muscular contrac-

tion giving rise to stiffening of the limbs and trunk. The muscles at the back of the neck are especially liable to be so affected, and in consequence, the head may be drawn far backwards. For the same reason the features may be drawn into ludicrous or frightful grimaces. In severe cases there may be, at this period, general convulsions.

Day by day the somnolence increases, merging at length into coma so profound that the infant cannot be roused, though it may still, at frequent intervals, fetch a deep sigh and utter the lonely, harrowing "cri meningitique." This signals the advent of what has been called the third stage, when the symptoms are mainly those of compression of the brain. General and special sensibility become abolished. The pupils, before contracted, are now dilated, often unequally so, and unresponsive or slowly responsive to light. The strabismus continues. The eye-balls, no longer moistened by winking, lose their transparency, while flakes of lymph collect on the margins of the lids and at the inner canthi. The tongue becomes dry and the lips and gums are dark and encrusted. Paralysis of various parts and degrees occur. Often one leg lies extended and powerless while the other is kept in more or less constant movement. Paralysis of the sphincters is not uncommon in the last days, causing leakage of urine and an annoying looseness instead of the previous constipation.

The circulation and respiration now assume new features. The pulse, lately slow and irregular, increases in frequency, reaching, it may be, a hundred and sixty or eighty, but becoming constantly more feeble and indistinct. The breathing, though commonly somewhat later, becomes correspondingly rapid, reaching before death sixty or eighty inspirations a minute and becoming

very noisy from tracheal and bronchial rales.

In the last days sudden muscular contractions or twitchings are still frequent and general spasms are more imminent than at any previous period. The face becomes livid and the body bedewed with a profuse perspiration. The coma deepens, the pulse fades away at the wrist; respiration grows more noisy and labored, so that the struggle is painful to witness, though the infant is known to be insensible to suffering. In some cases the temperature becomes very high before death, from 106° to 110° ; in others it falls even below the normal.

It is related by many writers that in rare instances the child suddenly comes to itself, looks about, recognizes friends and perhaps speaks to them. But their reviving hopes are doomed to disappointment—for it soon falls back into a condition of hopeless coma.

The ordinary duration of tubercular meningitis is between ten and twenty-one days, but it may be so violent as to kill the little one in two or three days, or so mild that it lingers for months.

The prognosis is the gravest possible. So few cases of recovery have been put on record that these have been considered as open to a suspicion of a mistaken diagnosis. It is true that trivial disorders of digestion may give rise to symptoms simulative of meningitis. Some time ago I saw a case of this description in Marcellus with my friend, Dr. Henry W. Post. So marked were the head symptoms in this boy that I was led to make a diagnosis of meningitis. But a brisk cathartic and a few doses of bromine were followed by speedy and permanent amendment. Probably there have been recoveries after proper *early* treatment. But, when the disease is well under way, I believe there is no hope; so little, at any rate,

that you are fully warranted in giving an unfavorable opinion.

Treatment.—Up to a recent period the methods pursued with acute meningitis were more than heroic; they were cruel. Local and general bleedings, large blisters to the scalp and calomel, sometimes in enormous doses—these were the agents employed to overcome and expel the demon. But they never did it and most of the profession now advocate more humane if not more successful procedures.

If you are so clever as to recognise the disease at its invasion, there is a little chance of success. The child should be kept quiet in a darkened room and shielded from occasion of annoyance and fretfulness. The diet should be as nutritious as the patient will take. Milk, cream and animal broths are best. A hot foot-bath fortified with mustard has an excellent effect in relieving the cerebral hyperæmia, and I would use it as many as four or five times in the twenty-four hours. The feet and legs should be kept warm by bottles of hot water or other means. Cold water should be applied to the head, and I know of no better method than the use of cloths wrung from iced water and often changed. I think bladders of ice to the naked scalp of a little child, as some have advised, are too depressing. If used at all, some thick substance, as a fold of flannel, should be interposed between the ice and the head. Correct constipation by such laxatives as are agreeable and easy of administration, but be chary of much physic, for the chances are not made better, but rather the worse by hyper-catharsis. About the only remedy that seems to have anything in its favor as making for recovery is potassium iodide. Its use in this disease was suggested by Rœser in 1840 and it has since been largely used. Con-

siderable evidence for it has now been offered, recoveries having been reported by West and Niemeyer and other accurate observers. It may be given in doses of from two to five grains three or four times a day. I would not wait for symptoms of effusion, but would give it as soon as I suspected the character of the malady.

To relieve the headache and to control muscular spasm and convulsions, bromide of potassium is probably our best remedy. It may be given in the same doses as the iodide and repeated, if necessary, as often as every second hour. I have sometimes found it of service to combine chloral with the bromide in order to lessen spasmodic movement and secure rest. The quantity of this to be given will vary with the patient. I have usually been able to secure my ends with two or three grains, but in one little boy nothing less than ten grains would answer. Valerian in fluid extract or other form will also be found of service in relieving the general restlessness and the tendency to muscular spasm. Hitherto I have said nothing of opiates. In general they are not very well borne because they increase the cerebral congestion, yet I have met with cases where nothing but opiates would relieve the extreme agony.

By the early and persistent employment of such means as these you may possibly save your patient, and then in your surprise you will probably ask yourself whether your diagnosis has not been erroneous.

The prophylactic treatment of tubercular meningitis promises more than the direct. To prevent so terrific a malady is better than to cure it, even if we could cure it. A child with inherited tuberculosis or scrofulous tendencies should be well looked after, especially if it begins to lose flesh and spirit and to ex-

hibit those indistinct and growing evidences of poorliness that are so often precursory to this disease. Cod liver oil should be given—a half teaspoonful or more three times a day. The diet should be nutritous, the best that can be digested. Stimulants are in order, Bourbon or brandy, with milk. Mild exercises in the open air, that interest and amuse without fatiguing the patient, should be provided. Change of air and scene, as from the city to the country, is often of service. If there are humid eruptions about the head and face do not attempt to “dry them up” by local applications, but rather let them disappear of themselves, as they probably will do if you can secure an improvement in the general condition.

Diarrhœa in Children.

R. Zinci oxidi, gr. j.; bismuth subnit., 3j.; pepsin pulv., grs. x.; sacch. lactis., q. s. M. ft. Pul. No. xii. Sig. One every three or four hours.

OBSTETRICS.

Hour Glass Contraction.

Prof. PARVIN teaches that hour-glass contraction is a general contraction of the uterus. The placenta in the upper portion holds apart the walls there, and the external os is in its normal state of relaxation. The muscular structure and nervous supply of the uterus render an unequal contraction inconceivable.—*Col. & Clin. Record.*

Precisely this view has been held and taught by the undersigned. The following extract is from a clinical note published by him in the Proceedings of the Med. Soc. Co. King, Aug., '82.

CHARLES JEWETT.

“The placenta was found wholly separated but firmly grasped in a globular cavity formed by the contraction upon it of the upper segment of the uterus. The opening into this globular cavity was barely sufficient to admit the finger. The portion of the uterus below the point of constriction was trumpet-shaped, expanding gradually from above downward.

“In brief, the case was a typical one of so-called hour-glass contraction. By carrying the hand up into the cervix and slowly dilating the constriction with the fingers, the placenta was finally delivered.

“The above case affords a good illustration of the real character of this accident. * * * * *

“Hour-glass contraction was formerly attributed to paresis of a portion of the uterine muscular wall; in other words, to irregular contraction. Now we recognize in it the simple result of normal uterine contractions taking place upon a wholly imprisoned placenta.

“During labor, normally the greater mass of the uterine muscular fibres gradually gather into the upper segment of the uterus, whose walls thus become very thick. The lower uterine segment is left extremely thin. The muscular ridge at the point of division between the two segments is the ring of Bandl.

* * * * *

All that portion of the uterus below Bandl's ring, sometimes termed the obstetrical cervix, is generally in a flaccid condition for several hours after delivery, taking no part in the contractions of the third stage. If violent contractions now occur while the placenta is wholly in the upper segment of the uterus, the ring of Bandl is liable to be closed and the placenta imprisoned in the cavity above. The muscular action of the uterus which tends to expel the

placenta when Bandl's ring is prevented from closing by a portion of the placenta lying therein, tends to imprison the placenta when it lies wholly above that point.

"Obviously, the premature administration of ergot is liable to give rise to the above accident. Accordingly, in cases of hour-glass contraction, it is not infrequently found that ergot had been used during the second stage."

Sulphate of Copper as an Antiseptic in Midwifery.

M. CHARPENTIER (*Gaz. Hebdom. de Méd. et de Chir.*), recently reported to the French Académie de Médecine a series of experiments that he had made with sulphate of copper as a preventive of putrefaction, the results of which had convinced him that, in a solution of one part of the salt in one hundred parts of water, the agent was a trustworthy and harmless antiseptic. He had therefore used it as a vaginal and uterine injection at the *clinique d'accouchement*, where there had been no deaths since the 15th of June, whereas for the preceding six months, in the service of the late Professor Depaul, there had been twelve deaths from septicæmia in three hundred and ninety-seven cases of confinement. This happy change M. Charpentier imputes to the use of the sulphate of copper. He urges in favor of this agent that it is perfectly safe, very cheap, easily managed, and an instantaneous disinfectant as well as a powerful antiseptic: also, that its astringent and coagulating properties are such that it may perhaps in the future take the place of perchloride of iron as a hæmostatic, over which it has the advantage of not clogging wounds. The solution should be used warm, of the strength of one part to one hundred. In a number of cases of large thrombus of the vulva

the use of this antiseptic was followed by recovery without the formation of a drop of pus, and in a case of foul abscess of the urethro-vaginal septum, it overcame both the fœtor and the symptoms of putrid infection at once, after carbolic acid had failed.—*N. Y. Med. Jour.*

Active Interference in the Management of Abortion.

A recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains an article by Dr. H. SPÖNDLY, of Zurich, on the above subject. The interference which he recommends is simply that, in every case of abortion, the medical attendant should take care that nothing is left in the uterus, should completely remove placenta and membranes; and that in every case of threatened abortion where the hemorrhage is profuse, and does not yield to treatment, the uterus should be emptied as soon as possible. The expulsion of the placenta should not be left to nature. In this recommendation there is of course nothing novel, nor has Dr. Spöndly any new instrument, or method of effecting the desired end. The main importance and interest of the paper is in the fact that the author gives a series of fifty-three cases in which he acted on the principles which he lays down, and with uniformly good results.—*Med. & Surg. Reporter.*

[In inevitable abortion complicated with hemorrhage or sepsis, no one can dissent from the policy of immediate interference. In other cases a reasonably prompt evacuation of the uterus is the surest means of averting these dangerous complications. Those cases only should be left to nature in which she promises speedily to empty the uterus without artificial aid, and speedily fulfils her promise.] J.

DISEASES OF WOMEN.

Cystitis.

Dr. WILLIAM GARDNER (*Canada Med. & Surg. Jour.*)—The subject of the lecture for this morning is, if judged by its frequency and the amount of distress it causes the unfortunate sufferer, one of the most unfortunate that engages our attention.

While in some respects the disease resembles cystitis in our own sex, it differs from it in many others. These differences refer mainly to the causation, as influenced by that important adjacent organ, the uterus, with its remarkable functions and the many diseases to which it is subject. It is divided into *acute* and *chronic*. It may affect each or all of the coats of the bladder, and so be of the *mucosa*, of the peritoneal investment, or of the muscular coat. But these are often steps in a general process, the disease beginning in the *mucosa* and extending to the other coats, and this is the most frequent order, or begining in the serous coat, as an epicystitis or pericystitis, and extending inwards to the mucous coat, which is much rarer. The causes are many. Injuries from blows, falls, coitus, sudden displacement of the uterus, fracture of pelvic bones, pressure of the child's head during labor, over distension of the organ after labor or under other circumstances, rough catheterization or frequently repeated gentle use of the catheter, introduction of foreign bodies as practised by masturbating and hysterical women, abnormal urine, and extension of inflammation from adjacent organs, as of gonorrhœal or simple vaginitis or vulvitis, or from the peritoneal surface. A little more extended consideration of some of these causes will be profitable. The pregnant, par-

turient, and recently-delivered woman, in whom the parts are in a condition of physiological activity and of increased vascularity, or have undergone contusion from pressure, or are paralyzed, and so liable to over distension, is especially prone to cystitis. Hence the great frequency of the disease under such circumstances, and its unusual difficulty of cure. Of catheterization, it must be said that it is always a source of irritation, however gently performed. How much more so must it be if done roughly, and if the necessity be frequent. But there is another source of danger in the use of unclean catheters. Winckel has said that the mucous membrane of the bladder is the most sensitive in the body to sepsis. These facts convey to you self-evident and important cautions.

Abnormal urine is most important in its effects in causing inflammation of the mucous coat of the bladder. Probably, however, it is not so powerful if the mucous coat be healthy. Congestion, as from over-distension, furnishes a sufficient pre-disposition. Women frequently suffer from over-distension of the bladder in conditions other than puerperal. For such reasons and others, women often delay emptying the bladder for a long time after there is a safe amount of distension. Many cases of cystitis are thus set up in the sex. Now let us see how such a cause may act. Over-distension of the bladder means congestion. Over-distention leads to deficient power to expel the last drops of a urine which, from the congestion, contains mucus. The mucus decomposes. It sets up decomposition of the urea, and carbonate of ammonia is produced. This renders the urine alkaline and therefore foreign and irritant to the coat of the bladder. Another result of alkaline urine is the precipitation of the

earthy and triple phosphates, and so inflammation is set up.

The symptoms of cystitis are well marked. Frequent and painful micturition, accompanied with tenesmus of the bladder. The pain, at first local—pelvic and perineal—radiates to the naval or the breast and loins. The urine, at first pale, of low specific gravity, and acid, becomes alkaline and turbid from blood, mucus, pus and precipitation of phosphates. The disease is not always confined to the bladder. It may extend up the ureters to the kidneys, and so ureteritis, pyelitis, pyonephrosis and renal abscess result. In the bladder itself, a cystitis, at first merely catarrhal, may become ulcerative, or the inflammation may be diphtheritic or gangrenous.

The diagnosis is usually easy, but it cannot be made from the symptom of frequent and painful micturition. The urine must contain mucous, blood or pus. The conditions with which it may be confounded are irritation of the bladder from uterine displacement; irritation or inflammation, with cicatrization of the uterosacral ligaments, other forms of pelvic peritonitis, fissure at the neck of the bladder, urethritis, and stone in the bladder. As regards most of these, it may be said that to be forewarned is to be forearmed.

The prognosis is much better than it would have been twenty years ago. In healthy subjects it is good. In the pregnant or lying-in woman, it is not so favorable. It is in such more apt to become chronic, and to leave the part weakened and sensitive. When ulceration is present the outlook is by no means so favorable, although not absolutely bad. The tendency to hemorrhage, to extension to the peritoneum, to perforation, to extension to the kidney, to blood-poisoning, constitute many

avenues to a fatal result which sometimes comes to the patient when it is not expected.

The treatment, being suitable, ought to be early and prompt, to prevent the disease becoming chronic. In the acute stages keep her at rest in bed, keep the skin acting, and also the bowels, by the use of saline laxatives or mineral waters, aided, if necessary, by cold water enemata. Indigestion must be removed, and a free portal circulation maintained. An important indication is to render the urine as bland and unirritating as possible. A diet of large quantities of skim-milk, diluted, in cases where the urine is very acid, with some natural alkaline water, as Vichy or Apollinaris. Linseed tea and the decoction of *triticum repens* in large quantities acts as diluents to the urine, and perhaps as something more, especially in the case of the latter. A good prescription in the early stages is a combination of citrate or bicarbonate of potash with infusion of buchu. Leeches to the anterior vaginal wall, and poultices of linseed meal and tincture of opium to the hypogastrium, are often of undoubted value. To relieve the severe pain and distressing tenesmus, you will be obliged to give sedatives and narcotics, but I must caution you to withhold the most powerful of these, the opiates, as long as possible. They undoubtedly relieve pain, but they also derange digestion and act injuriously in other ways. By mouth, the Dover's powder is the least injurious. The rectal suppository is probably the most efficacious form for the administration of morphia or other remedies. Other remedies are, however, to be first tried. Camphor is useful. The bromide of potassium sometimes acts best. It must be given in full doses—20 grains every four hours.

Skene speaks well of hydrobromic acid. It may be given in doses of two

to four fluidrachms of the dilute acid, well diluted with water. Marked alkalinity of the urine furnishes an indication not very easily met. The only acid useful for this purpose is the benzoic; the dose is ten grains. A small dose, say five grains, of borax should be added to render the benzoic acid soluble. The combined dose may be given in infusion of buchu. In the later stages of this, as of other mucous inflammations, balsamic remedies sometimes do good. Balsam of Peru and copabia, and oil of turpentine, are the most useful. In cases where there is marked foetid urine, salicylate of soda has been highly commended. But the time soon comes, in cases at all severe, at which local applications to the vesical mucous membrane must be used, if we are to do the best for our patients. The simple washing out of the bladder is often of the greatest value; but the method of this simple operation is of the utmost consequence. If done carefully, so that the coats of the bladder suffer no mechanical violence, much good may be effected; otherwise it may be most injurious. As a rule, the piston or bulb syringe must be avoided. Use, then, a fountain syringe. The most convenient form is a small-sized glass funnel, with two feet of rubber tubing attached, the other end of the tubing being slipped over the open end of a No. 8 gum-elastic catheter. Violent contact of the coats of the bladder as it contracts with the end of the catheter is often most hurtful. To obviate this, the catheter must be made to barely enter the cavity. To attain this, especially when the patient or her attendant (as must often be the case) administers the injection, slip over the catheter a guard, which may be a piece of thin, flat wood or gutta-percha perforated, leaving only two-and-a-half or

three inches of the catheter from its point. The guard rests against the vulva and prevents the catheter penetrating more than is necessary to just enter the cavity. With such a simple cheap apparatus, which any one can prepare in a few minutes, every object may be attained in the majority of cases. Gravity is the injecting force. It is even, not jerky, and may be as gentle as desired, according to the height of the funnel. The patient being placed on her back, with the knees drawn up, the catheter is inserted, and without removing it, the bladder may thus be thoroughly washed out, and the cleansing fluid having been allowed to flow out, the medicated solution is run in. To avoid irritation from over-distension, no more than, at most, two fluid ounces ought to be injected at once. This is a point on which Sir Henry Thompson is most emphatic in his instructions for injecting the male bladder. It is equally important in the female. Next, some instructions as to the solutions you are to use. For mere washing-out purposes, solutions of common salt or of potassium chlorate are best—3 i to the pint. These solutions are less irritating than plain water. Carbolic acid, 1 to 60, is also valuable. Then there are various astringents which sometimes are beneficial. Such are acetate of lead, sulphate of zinc and tannic acid, one or two grs. to the ounce. Of this class of remedies, I have reserved for last that which, in my opinion, is the most valuable—the nitrate of silver. You will find, by most writers, solutions of 1 to 2 grs. to the ounce recommended. This is far less valuable than a much stronger solution, 30 or 40 grs. to the ounce, of which I have had some recent very satisfactory experience. Such a solution causes severe pain and vesical

tenesmus for a few minutes, and is well to be prepared with your hyperdermic syringe when administering it, which usually must be at the patient's own home. Confinement to bed for a day after is advisable. I may here mention a case I recently saw. The symptoms were of several years' duration, and came on after confinement. During nearly a year I had tried a variety of astringents, with only slight benefit, but my attention was directed, during the winter, to the stronger solutions of silver nitrate by an article in the *Philadelphia Med. News*. I resolved to try the remedy. The results were most satisfactory. After two applications the patient expressed herself as being better than for eight years. In this strength, the remedy ought not to be used oftener than once a week. Morphia has been injected to relieve severe pain. Solutions of 1 to 2 grs. to the ounce may be employed.

The value of rest, so well recognized in the treatment of surgical cases, and of medical cases, too, is no less in inflammations of the bladder than other inflammations. It is the difficulty of attaining this which renders cystitis hard to cure. In some cases, especially when the urethra is not involved, this may be attained by placing a catheter in the bladder, and allowing it to remain there constantly, removing it twice daily only for the purpose of cleansing it. This is to be done by forcing a stream of carbolized water through it. When a catheter can be thus tolerated, it will be of great value. Some years ago Dr. John Goodman of Louisville, Kentucky, published a paper in the *American Journal of Obstetrics*, Vol. VII, page 413 (1874), in which he reported a series of cases in which the method proved most valuable. He used a short catheter with a bulbous

extremity, which secures its retention within the bladder. The other end is provided with a flange which prevents its slipping in. A piece of rubber tubing attached to the outer end conveys the urine to some convenient receptacle. I show you Skene's modification of the Goodman catheter. Another means of securing rest is by an operation which has been done rather frequently in recent years. I mean rapid dilatation of the urethra. I reported a case of severe chronic cystitis cured by this operation in the *Canada Med. and Surg. Journal*. I had, however, a subsequent failure, but the case was a much worse one. At that time I did not know the value of the strong solutions of nitrate of silver, or probably I should not have done the operation, which has been followed in many cases by the deplorable result of permanent incontinence of urine.

Lastly, and, as I believe, the most valuable resource of all for securing complete rest of the bladder, an artificial vesico-vaginal fistula may be formed. This operation was first done by the late Dr. Willard Parker, of New York, for the purpose of drainage of the bladder in a man. Dr. Emmet, of New York, justly claims priority in the performance of the operation for the cure of chronic cystitis in women. By it the bladder is placed completely at rest for the requisite length of time, and an opening afforded for the application of medicated fluids to the lining membrane. It is true that the patient becomes a sufferer from a distressing infirmity, but one involving much less suffering than the condition for which it was inflicted, and perfectly curable by subsequent operation. If it be further remembered that it is the only mode of treatment which affords a chance of life to the sufferer from a

disease which so often leads to death from extension to the kidney or otherwise, its justification must be complete.

[When one has read about major operations for the relief of rare diseases until he is weary, the gynecologist finds pleasure and profit in turning to a lecture of such practical value as this by Prof. William Gardner.

The first sentence of the lecture expresses a truism which thousands of women know to their sorrow, and yet the more dramatic gynecologists appear to be slow to recognize the importance of the subject. The experience of so reliable an observer as Prof. Gardner regarding the treatment is of great value and worthy of full confidence.]

A. J. C. S.

Menstrual Leucorrhœa contra indications for Vaginal Injections.

DR. STOVELL C. PARSONS (*South. Med. Record*): The frequency with which you meet unmarried females afflicted with menstrual leucorrhœa under treatment identically the same as though originating from other causes, has been a constant matter of surprise to me, as they necessarily require one altogether different in consequence of the surroundings to which they are subjected.

There should be as much attention given in every instance to the proper analysis of the symptoms as is exercised by the lawyer for each client, and when so considered, the physician will concur with the attorney that the case is entirely distinct and separate, regardless of the close similarity of all the signs that may be presented by the disease.

Menstrual leucorrhœa is defined as a discharge that to a greater or less degree, takes the place of the menses.

Such being the complaint, the plan of treatment that seems to be the most

practical, is to turn our attention to the cause, and endeavor to establish the menses in quantity both sufficient and regular, and not to treat the leucorrhœa as a simple local affair by ablutions and astringents. When treated by astringent injections we find that it develops into a long and chronic complaint, and instead of relieving, we aggravate her symptoms in consequence of the undue excitability caused by the friction of the liquid and the pipe of the syringe.

I will quote one case as an instance: Miss Mary M——, age 23, complaining of general malaise, backache, pain in left side and abdomen, subsequently located over the ovaries, and a slight leucorrhœa, applies to her physician and is ordered to use as an injection daily in the morning a solution of alum, with the strength of a drachm to the pint of tepid water.

Not recovering she consults another physician; is examined and her case is diagnosed retroversion with leucorrhœa, with the advice to continue the same treatment, and in addition use the injection in the evening before retiring.

The treatment was continued for a period of three months and then came under my observation, with the same symptoms of her original complaint considerably aggravated, and in addition suffering from melancholia, occipital headache, lassitude, and lascivious dreams accompanied with an orgasm most every night, while she was also liable to have an orgasm in the presence of men.

She states that the using of the syringe excites her venereal passions, and, that previous to the use of the same, she suffered none whatever from any of the latter symptoms which have been developed in a period of about a year.

There are quite a large number of

married, and a larger percentage of widows who object to vaginal injection on account of its being "so disagreeable" as they term it, and when the cause is traced out, it results in finding that it is in consequence of arousing a passion that they do not wish or can not gratify.

In every instance the use of the syringe has been the means of continuing and aggravating the leucorrhœa, and by the constant irritation developed the more serious symptoms as heretofore described.

[No end of trouble has been caused by such treatment as that given above. Dr. Parsons does well to thus pointedly call attention to the subject. General practitioners are more frequently the offenders in this matter than Gynecologists.]

A. J. C. S.

The Possible Dangers of Trachelorrhaphy.

In a paper on this subject published in the *Amer. Jour. of Obstet.*, the author, Dr. B. HUGHES WELLS, of New York, presents the following resumé :

"The most important points which may be deduced from what has been said concerning the *primary dangers* would seem to be :

1. That primary hemorrhage, though not uncommon, is rarely alarming, and when severe, is easily controlled by traction exerted upon the cervix, or by one or more sutures passed deeply under bleeding points.

2. That secondary hemorrhage is rare, but when it does occur, is a serious danger. That it may happen not only when the circular artery has been wounded during the operation, but also at times as a consequence of the cutting of a suture into a previously intact arterial twig. That when it does happen, if very severe, and the instruments

are at hand, time should not be wasted in trying other means, but that we should at once apply the deep suture, twisted tightly on the side from which the bleeding comes.

In the absence of the proper instruments, and in moderate cases, tight tamponing with discs of alum-cotton will suffice, and not interfere with union.

3. On account of the danger of secondary hemorrhage from the cervix, it is an open question, whether, in those cases where both lesions exist together, it is not best and wise to defer the repair of the lacerated perineum to some time after the closure of the cervical rent and, not, as a routine practice, do both operations at one sitting.

4. Menstruation coming on before the removal of the sutures does not necessarily cause trouble if only they be allowed to remain *in situ* for a few days longer, or until it ceases.

5. Non-union occurs in about eight per cent. of all operations, the percentage of failure being larger in hospital than in private practice.

A flabby hyperemic condition of the cervix is most apt to lead to this result, but it may also be produced by too tight or too many sutures.

6. Serious inflammation is not a very infrequent sequence, and even death occasionally follows.

7. Inflammation frequently occurs where there has been previous cellulitis, and it can be best avoided by recourse to the manipulative measures described.

What have been considered as *secondary dangers* by some writers are shown to be in most cases palpable benefits, the facts given proving the following :

1. Trachelorrhaphy does not cause sterility.

2. On the contrary, it causes a decided increase in the productive fertility of the subjects of the operation.

3. After the operation there is even less liability to subsequent cervical laceration than there was at first.

4. There is no danger of anything like serious obstruction to subsequent labors by the cicatricial tissue formed in the cervix.

5. There is very little danger in producing serious stenosis of the cervical canal, except through inexcusable carelessness."

[That there is "less liability to subsequent cervical laceration than there was at first," may be taken as a point not yet positively settled. Dr. Wells inclines to magnify the dangers and the benefits of this operation, if he takes his data from skilled operators.]

A. J. C. S.

Prolapse of the Uterus.

Since December 14, 1881, Dr. ALEXANDER, of Liverpool, has operated in twenty-one cases of prolapse, or of posterior displacement of the uterus, by shortening the round ligaments. The results have been generally very satisfactory. The operation has been performed by others; among these are Dr. Inlach, one of the surgeons to the Liverpool Hospital for Women, who has operated fifteen times in the last sixteen months, and Dr. Burton, another surgeon to the same hospital, who has operated six times.

The operation appears to be a reasonable one, not very difficult of performance, and, if its results prove permanent, one that is to be commended, for certainly posterior displacements and prolapse of the uterus, if at all chronic, while they may be palliated, or relieved at least temporarily, very often are most rebellious to cure.—*Med News.*

The Anatomy of the Hymen.

Dr. S. Pozzi has been making some investigations on this subject, which he thus formulates in the *Gaz. Med. de Paris*:

1. The hymen is an appendage of the vulva, and not of the vagina; it is formed at the expense of the urogenital sinus, which also forms a short vestibular canal, this last being the entrance to the vaginal canal.

2. The name *bulb of the vagina* has been unwisely given to the lower part of the vascular plexus, which occupies a prominent position in that canal. There is no ground for distinguishing a distinct organ here, and it should not be compared to the bulb of the urethra in man. It may as well be said that the corpora spongiosa are the analogues of the labia minora.

3. An attentive examination of the vestibular region in woman will show a small band or frænum (*bride*) between the clitoris and the meatus, about two-tenths of an inch long in the adult, easily recognized by the rectilinear outline of its borders, marked by a median furrow, and divided inferiorly so as to encircle the meatus. When the hymen exists, it appears to be continuous with the frænum. Pozzi proposes to call this small band, now described for the first time, the male frænum of the vestibule (*bride masculine du vestibule*).

The study of the belano urethral frænum—so noticeable in cases of hypospadias—shows the identical connections between that large band and the atrophied frænum (*bride*) of the female.

The bifid condition at the meatus and its continuity with the hymen are easily shown. But in hypospadias it is clear that the frænum is a vestige of the corpus spongiosum arrested in the embryonic stage. The hymen of the hypos-

padias then, proceeding from the frænum, is an appendage of the corpus spongiosum, and is the terminal part or bulb. This conclusion may be applied to the female organ, and it may be said that *the hymen in the female is the analogue of the bulb of the urethra in man; it is the bulb arrested in the fetal state, non-erectile, membraniform.* [Henle has noted the frequent presence of cavernous or erectile tissue in the hymen.]

The connections of the gland of Bartholin to those of Cowper may be also easily made out. The considerable length of the excretory canal for the male glands, compared with their shortness in the female, should be especially considered. This admits of the opening of the canal considerably in front of the membraneous region, at a certain distance in front of the posterior part of the bulb; that is to say, at a point exactly corresponding to the opening of the duct of Bartholin, in front of the hymen, at a certain distance from the fourchette. The opening of Bartholin's gland in the pre-hymeneal portion of the vulva is the origin of that singular lengthening of Cowper's duct.

6. The male frænum of the vestibule in woman is the vestige of the anterior or cylindroid portion of the corpora spongiosa, just as the hymen is the vestige of their posterior or ovoid portion.
—*Med. & Surg. Reporter.*

DISEASES OF CHILDREN.

The Causes of Convulsions in Children.

KJELLBERG, in an interesting article on convulsions in children ("Archiv. für Kinderheilkunde," iv, 1883), classifies the former into symptomatic and symptomatic. Symptomatic convulsions are due to direct irritation of the "convul-

sion center" in the medulla oblongata, and may be brought about either by changes in the amount of blood supplied to the brain or by alterations in the quality of the blood. Changes of the former kind occur as the result of anæmia (which to produce convulsions must be sudden in its development), active (fluxionary) hyperæmia, and passive (venous) hyperæmia. Anæmia of the brain, again may in children be due to sudden hæmorrhage, to excessive loss of fluid in diarrhœa or vomiting, to arterial spasm, to compression of the skull from without, to intracranial pressure from external changes in the brain itself, and to the effect of certain general diseases. Active hyperæmia, which, as the author points out, really produces cortical anæmia by constriction of the cerebral capillaries due to the reactionary pressure exerted upon them by the circumvascular lymph-fluid, occurs very frequently in children, and is brought on by anything which will increase the heart-action—emotion, the febrile state, etc. Passive hyperæmia of the brain occurs in children as the result of laryngeal or intra-thoracic obstruction to the entrance of air, or of cardiac disease or of distention of the stomach exciting both respiratory and cardiac embarrassment. Changes in the character of blood supplied to the brain, constituting the second class of causes producing convulsions by direct irritation of the medulla, are themselves induced either by pyrexia, by the introduction of toxic substances (atropine, tobacco, alcohol, poisonous gases) from without, or by the developement of poisons with the circulation (pyæmia, cholæmia etc.). Whether the uræmic poison acts directly upon the medulla, or indirectly by its effect in causing cerebral anæmia, is uncertain. The second great division of causes which

may produce convulsions includes all agents acting upon the peripheral nerves and producing spasm by reflex irritation (sympathetic convulsions). Such causes are found in irritation, due to wounds, burns, and other lesions of the integument, foreign bodies in the ear and nose, renal calculus, etc. By far the most frequent seat of irritation, however, is found in the alimentary tract. Among other causes including under this latter head the author considers to which great importance used to be ascribed—namely, teething and the presence of worms in the intestines. Both, he thinks, have their influence, which it would be wrong to deny absolutely, as some have done, but this influence is certainly pretty limited, and he especially warns us against ascribing every attack of convulsions in children who have worms to the account of the latter. The author believes that a hereditary predisposition exists in some cases to account for the convulsions. In other cases convulsions are simulated, and the detection of the imposture may be quite difficult. It is worthy of remark that Kjelberg, in giving a reason for the prevalence of convulsions in childhood, ascribes it not to an excessive excitability of the nervous centers, but to a deficient activity of the cerebral centers which inhibit reflex activity.—*N. Y. Med. Journal*.

Treatment of Scrofulides in Children.

The *Journal of Cutaneous and Venereal Diseases* thus summarizes some conclusions recently published by M. SABATIER: 1. The best mode of treating scrofulides of children is by scraping, followed by the thermo-cautery. Scraping removes the diseased tissue, and cauterization completes the work by destroying the pathological elements which

have survived the former process, and by setting up a benign and reparative inflammation. 2. After every operation for scrofulide of the limbs an airtight dressing (*pansement par occlusion*) with strips of diachylon plaster will be found of great advantage by repressing the tendency to exuberant granulations. The sore heals more rapidly, and the resulting cicatrix is thinner and more flexible than when the usual bandages are employed. 3. This kind of dressing, however, is almost impossible of application on the face and neck. 4. Local treatment of a scrofulide should always be resorted to in aid of constitutional measures. Only the former will avail to arrest a suppurating process which has lasted for several years. Without local treatment, too, the patient is liable to be more or less disfigured by the cicatricial keloids which will inevitably be produced. It is in cases of tuberculous scrofulide, against which the best-directed constitutional treatment is generally powerless, that local measures are of the greatest utility. By destroying the tubercles at the outset of their development, we effectually check the progress of the evil.—*N. Y. Med. Jour.*

The Value of Milk Treated by Pancreas Ferments.

Dr. FRANCIS L. HAYNES, of Philadelphia, thus writes in the *Am. Jour. of Obstetrics*:

I have used milk artificially digested by pancreas-ferments in the following cases:

1. Chronic intestinal catarrh of six month's duration in a child one year old. Marked wasting; rickets. Rapid recovery.

2. Chronic intestinal catarrh of seven months' duration in a child fifteen

months old. Recovery in ten days and rapid increase in weight,

3. Chronic gastro-intestinal catarrh (from birth), with acute catarrhal pneumonia, in a child one year old. The peptone agreed thoroughly with this patient, and the vomiting and purging ceased. The pneumonia continued, and destroyed life by exhaustion in one month.

4. Extreme emaciation and exhaustion in a child three weeks old. Rapid recovery. One month after, during very hot weather, cholera infantum and death.

5. Cholera infantum in a child two months old. The milk peptone was used as soon as the vomiting and purging had been checked. Rapid recovery.

The only other medication used in these cases was morphia to check the bowels, or to meet other indications.

In numerous cases of indigestion, intestinal catarrh and other diseases in adults, I have used milk peptones, and frequently with benefit.

The preparation used is the "Extractum Pancreatis" made by Fairchild Bros. & Foster, 60 Fulton street, N. Y.

The following formula is used, and the druggist is directed to furnish a scoop holding a scruple of the powder: R. Extract pancreatis, 3 j.; sodii bicarbonatis, 3 iij. M. et Sig. Add scoopful to a gill of water; mix with pint of fresh milk; keep this mixture at a the temperature of 110° for two hours. Boil, place while hot in bottles, and keep on ice.

In the absence of a thermometer, the mother is directed to keep the milk so hot that she can barely hold some in the mouth.

The bottles used are beer bottles, with patent air-tight rubber tops.

If the milk is to be used immediately,

it is not necessary to boil and bottle it; but, if kept, it soon spoils.

Milk thus prepared has a bitter taste.

The directions for use are the same as for ordinary milk.

The Bromides in the Treatment of a Neurotic Diarrhœa of Children.

At a recent meeting of the Harveian Society of London, a report of which we find in the *Medical Times*, of London, Dr. Lees calls attention to a class of cases, not very uncommon in children, in which the main symptom was an irresistible impulse to defecation, experienced almost immediately after taking food. Colic pain might or might not be present, but there was no sensation of weight at epigastrium, heartburn, flatulence, or other symptom of dyspepsia. The motions were usually semi-solid, not often watery or slimy, and frequently contained undigested food. Usually a motion was passed almost immediately after every meal, and perhaps once or twice more during the twenty-four hours. Dr. Lees pointed out that these symptoms were evidently due to a hyper-peristalsis of the alimentary canal, without increase of secretion, the two factors of ordinary diarrhœa being here disassociated. Such increase of peristalsis was probably due to irritation of the vagus nerve, which supplies the excitor fibers to the intestine, the splanchnics conveying the inhibitory fibers. The proximity of the nucleus of the vagus to that of the trigeminus, in the medulla, indicated the possibility that this increased excitability of the intestine might in part be due to dental irritation, the cases in question usually occurring during the period of second dentition. Believing in the purely neurotic origin of the symptoms, Dr. Lees had treated several cases with

bromide of potassium simply, without opium or any astringent, and had obtained immediate success, even in cases which had persisted for several months. The diarrhœa was usually arrested in a few days, and occasionally the children became so costive that the medicine had to be discontinued. Four cases were narrated, also a similar case occurring in an adult, in all of which speedy relief was given by the bromide. In conclusion it was remarked that individuals who suffered from these symptoms were often of a markedly neurotic temperament, timid and easily frightened.—*N. Y. Medical Journal*.

Naphtalin in Diarrhœa.

Especially in the diarrhœa of children, naphtalin seems to be an invaluable remedy. Prof. ROSSBACH, in Jena, has made a series of observations, and discovered that in all catarrhal conditions of the intestines, whether they co-existed with ulcerations or not, also in all inveterate, chronic intestinal affections, and in those of the small intestines, as well as in those of the large bowels, provided they did not depend upon organic, incurable diseases, as cancer, etc., naphtalin was a specific, and invariably caused the disappearance of the malady. He never noticed any bad side or after-effect, and most of the naphtalin passed off again by the bowels, while a small percentage of it changed to phenol, made its appearance in the urine. The usual dose for adults was from eight to ten grains daily. The remedy had also a very favorable influence upon all cases of vesical catarrh, the purulent discharge at once ceasing, and he attributes its beneficial effect in such cases to the changing of naphtalin to phenol in the urine—as phenol, especially in the nascent state, is a very

powerful aseptic remedy, at once destroying all micro-organisms with which it comes in contact.

Patients generally do not object to the taste of naphtalin if it is purified and obtained by sublimation; as a corrigens for its odor, a few drops of bergamot oil can best be recommended.—*Deutsch. Med. Zeit.*, p. 379, 1814.

Treatment for Cholera Infantum.

Dr. J. B. WORLEY (*Medical World*):
 ℞. Ingluvin, grs. xxv.; Dover's powder, grs. x.; Epsom salts, 3 iss.; soda bicarb., 3 ss.; water, 3 vi. Mix. S.—Teaspoonful to teaspoonful and a half every hour. Shake well.

If the case is severe, do not give anything else, neither food nor drink, until the stomach and bowels are well controlled. If the abdomen is hot, it is well to apply cloths rung out of cold water.

If fever is present the next day, give calomel and quinine.

If diarrhœa seems disposed to continue several days after, I give the following: ℞ Ferri carbonatis saccharati, 3 ss.; myrrhæ pulv., grs. xxiv.; aromatici pulv., 3 ss. Mix. S.—Divide into twelve powders. Give one three times a day.

I also have the little patient rubbed from his neck to his heels every night with lard. The lard must not be rancid in the least. I never neglect to lance the gums if they are swollen. If the child is nursing allow no food but the mother's milk to pass his lips. If the child has been weaned, goat's milk is much better for it than cow's milk.

Cholera Infantum, Summer Diarrhœa, etc.

Dr. C. F. ROSELLE (*Medical World*):
 ℞. Lactopeptine, 96-160 grains; subnit.

bismuth, 96-160 grains; acid. nit. (C. P.), 32 drops; syrup rhei arom., 1 ounce; aquæ camphoræ, ad. 4 ounces. Mix. Sig.—Teaspoonful in water after each flux from bowels. Tr, opium may be added to above, if necessary.

R. Acid. sulph., dil., 24 drops; salicin, 24 grains; glycerine, 3 ounces. Mix. Sig.—Teaspoonful three or four times daily, after acute symptoms have passed.

R. Fl. ext. trumpet plant, $\frac{1}{2}$ drachm; subnit. bismuth, 2 drachms; syrup simp., $\frac{1}{2}$ ounce; aqua pura, $1\frac{1}{2}$ ounces. Mix. Sig.—Teaspoonful after every evacuation; may also be given with tr. opii.

Dr. Bartholow uses: R. Bismuth subnit., 60 grains; sach. pepsin, 30 grains; zinci oxidi, 6 grains. Mix. Divide into 12 powders. Sig.—One powder every 4 to 6 hours.

R. Plumb. acetat., 8 grains; acid. acet., 6 drops; tr. opii deod., 4 drops; aqua dest., 1 ounce. Sig.—Teaspoonful every 2, 3 or four hours.

I have used all the above and can fully attest to their superior merits.

OBSTETRICS.

Vinegar in Post Partum Hæmorrhage.

About ten years since I attended a patient who had most violent *post partum* hæmorrhage, so severe, indeed, that I began to despair of arresting it. I had not ergot with me, and ice was not procurable. I directed the attendant to give a wineglassful of pure brandy. The uterus, which was before flaccid, contracted instantaneously under my hand, and the bleeding ceased. On proceeding to give some more brandy, I discovered that the patient had been given vinegar instead of brandy. The effect was so marked, that I inquired of the

old midwife who was with me, whether she had ever heard of vinegar being used before; she informed me that in her part of the country it was considered an excellent remedy, but that she had rarely, if ever, used it. When lecturing to a class of pupil-midwives shortly afterwards, I mentioned the case, and advised them most strongly to give the vinegar a trial in case of need. It seems to have escaped my memory until, about two years ago, the midwife at Queen Charlotte's Lying-in Hospital reminded me of my recommendation, and told me she had given vinegar repeated trials, and preferred it to ergot on account of its certain and instantaneous action. She was such a reliable and clever midwife that I felt her testimony could be taken. Since then I have carefully questioned all my pupil-midwives as to its action, for until recently it was never used in the hospital. They all agree that in their cases of hæmorrhage in the out-patient department, where they were allowed to use vinegar, hæmorrhage was arrested much more quickly than in the hospital with ergot. It was not until recently that I had a good test-case; the patient belonged to a family of "flooders;" her mother and two of her near relations had bled to death. As soon as the child was born she began to flood. I expelled the placenta and gave a wineglassful of vinegar. The uterus, which was very flaccid and constantly dilating, at once contracted firmly under my hand; it did not again relax, although the hæmorrhage continued to a moderate extent. At the end of fifteen minutes I gave a second dose, about two-thirds of a wineglassful. In both instances it was given pure, without any water. This soon arrested the hæmorrhage and the patient did well. I used no other means beyond holding the uterus, as I was perfectly satisfied with

the result. I feel certain that I should not have obtained such favorable results with ergot. The action of vinegar is so rapid that I refrain from using it or permitting its use before the placenta is expelled, for fear of causing a retention of that body and making its removal difficult. From my own experience and from the reports obtained from my midwives, pupil-midwives, and house-surgeons, I can confidently recommend the use of vinegar in *post partum* hæmorrhage. It is a remedy, if not always at hand, at any moment procurable, simple and harmless, not open to the objection against ergot, which in the hands of midwives is very liable to be used to hasten delivery, nor to the serious disadvantage and dangers of intra-uterine injections. If further trials, on a more extended scale, confirm my experience, I have no hesitation in saying that vinegar will have to be regarded almost as the specific for *post partum* hæmorrhage.—*British Med. Journal.—Obs. Gazette.*

Use of Forceps in Breech Presentations.

Dr. TRUZZI is strongly in favor of the use of forceps in breech presentations. He says that in cases of impaction of the breech in the upper or middle parts of the pelvic cavity, the prompt extraction of the fetus being indicated, and while one of the hips is not yet rotated under the arch of the pubes, it is better to have recourse to the application of the forceps to the fetal pelvis than trust to traction on the groins, which is insufficient if practiced with the fingers and dangerous with the blunt hook or fillet. The proposal of Olivier to apply the forceps on the thighs rather than to the pelvis of the fetus, though seductive theoretically, does not work practically. It is difficult to limit the pressure of the

forceps to the thighs alone, and if this be not done the abdomen would be pressed on, and possibly even the liver injured. The concave extremities of the forceps pressing on the convex surface of the thighs, slip downwards and forwards, and after a few pulls the original good hold is lost. Much easier and safer is the plan of applying the forceps to the side of the fetal pelvis. The iliac bones at this period are so elastic, and, compared with the bones of the head, are so protected by the soft parts, that even if the force of compression be somewhat abused, it is difficult to injure the fetal pelvis. To obtain a firm hold, the extremities of the blades must be passed beyond the crests of the ilia, and when the handles are approximated they bury themselves slightly in the walls of the abdomen, and, on traction being applied, bear on the crests of the ilia, and at the same time impart to the hips of the fetus a convexity to which the concavity of the blades of the forceps exactly adapts itself. The liver runs no risk since, large as it is in the fetus, it never descends to the level of the crest of the ilium; besides, its lowest part is the thin edge of the right lobe, which may be displaced inwards, but not lacerated or contused by pressure of the forceps. The same may be said of the intestine, which from its motility avoids even the consequences of considerable pressure if this be made in a methodical and skillful manner. A folded cloth may be placed, as suggested by Tarnier, between the handles of the forceps, to prevent too much compression. The forceps takes a better hold, and the author has never seen it slip in sacro-anterior positions. He recommends, in some cases of sacro-posterior positions, that the position should be altered by a forcible rotation of the sacrum forwards before using traction. It is better, he

says, to keep up a certain amount of compression in the intervals of traction; if this be not done, the iliac wings, by their great elasticity, tend to resume their normal place, and the forceps may be displaced.—*London Med. Record.*—*Ibid.*

An Attempt at Spontaneous Expulsion of Fœtus—and a Suggestion.

Dr. S. A. RICHARDSON (*New Eng. Med. Monthly*). On February 15th, about 1 P. M., a negro brought me a note from Dr. Dunavant, summoning me to his assistance with chloroform and instruments. After an eight mile ride, I arrived at a cabin, and on entering found Mrs. T—, colored, about 26 years of age, multipara, in labor.

The right hand and arm of fœtus were presenting with palm forward.

Dr. Davanant had given chloroform and used all possible means to deliver without instruments, but the fœtus was so jammed in the pelvis that it was impossible. The chin rested on the sternum, and the uterus was as hard as a rock. The husband said she had been in labor a week.

The patient was becoming rapidly exhausted, with no prospect of natural relief, and after a short consultation we decided to perform embryotomy.

Resigning the instruments to Dr. D. as my senior, I proceeded to anæsthetize the patient. She took the chloroform remarkably well, the pulse becoming stronger rather than weaker, and her breathing remaining full and regular throughout the operation.

After producing profound anæsthesia, an attempt was made to introduce the hand for the purpose of turning, but was unsuccessful on account of the rigidity and tension of the uterine muscles.

To obtain more room, the right arm was amputated at the shoulder, and as the part then presenting was about the middle of the dorsum, the vertebral column was severed as low as possible, the abdominal cavity pierced, and the internal organs removed. This procedure allowed room, and as the head slipped up over the flattened abdomen, between the legs of the fœtus, the uterus contracted rapidly and the two halves of the fœtus were expelled at one pain.

No trouble was experienced with the removal of the "after-birth" which came away on the next contraction.

The patient recovered rapidly from the anæsthesia, and expressed herself as being "a heap mo' easier."

She has now recovered completely. (March 6). In this case the pelvis was not "roomy" enough to admit of spontaneous expulsion, but nature made the attempt and the severing of the spinal column, and removal of the contents of the abdomen gave her room to complete the operation which she did. Version or decapitation were impossible, and we believed the procedure we adopted to be the only available one; and as the fœtus was dead we performed the operation with the success detailed.

Although the case may not be unique still I believe such cases are not common, and it suggested to me the possibility of constructing a new instrument which might assist the operator in decapitation and kindred operations.

The instrument I should suggest is a blunt hook, with a chain saw.

The hook "channelled" or grooved, and the handle tubular to hide the saw which should be made with good sized teeth, square on one edge and the other like a knife edge, the saw to run over a grooved roll in each end of the curve of the hook. The saw might be protected

beyond the end of the hook by a removable tubular shield and operated by a cord passed through an eye in the end of the saw.

The suggestion may be of no value, but if it is it may go for what it is worth.

I only know that if an instrument of the kind had been at hand it would have saved some time and perspiration in this case.

[The instrument suggested is no doubt practicable, but is in every way inferior to a powerful chain ecraseur. No other method can equal the simplicity, certainty and safety of the operation with the ecraseur after the chain is once in place. The whole difficulty of the decapitation consists in passing the tape with which to draw the chain around the neck. For this purpose I propose an instrument like the Elliott's Uterine Sound but of somewhat stouter construction. From my experience in this class of cases such an instrument I believe will greatly facilitate this at best difficult procedure of passing a tape around a neck or groin.] J.

A Case of Abdominal Pregnancy.

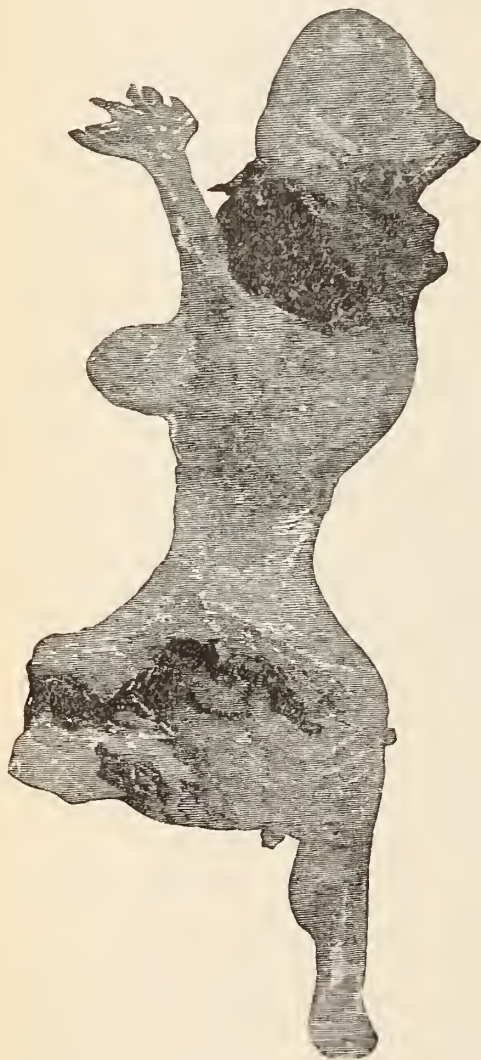
DR. FRANK L. ADAMS (*Pac. M. & S. Jour.*) Mrs. M., aged twenty-one years and seven months, of slender figure but generally enjoying good health, was about three months pregnant. On November 21st, 1883, at 6 P. M., she ate a hearty meal and appeared to be in exceptionally good spirits. About 7 o'clock, while sitting in a chair, some amusing remark caused her to laugh heartily, and almost immediately a severe pain commenced in the right iliac region. After being helped to her bed she began to vomit, and at the same time the pain increased in severity. In the absence of the family physician, Dr.

J. S. Adams, the writer was summoned and found the patient almost pulseless, extremely pale, cold, vomiting and suffering intensely. From the condition of the patient and the history given, the diagnosis of extra uterine pregnancy, with rupture and internal hemorrhage, was made. The patient being unable to retain anything in the stomach, 1-6 grain sulphate of morphine and 30 ℥. of brandy were administered hypodermically, and heat was applied to the extremities. Dr. Adams arrived soon after, and Dr. A. H. Agard was immediately called in consultation. The diagnosis of extra uterine pregnancy was concurred in, and the following treatment adopted; sulphate of morphia in 1-6-gr. doses hypodermically to control the pain, and brandy both by the mouth and under the skin as a stimulant. A sinapism over the stomach and bowels assisted in giving some measure of relief. Water was administered in drachm doses to allay the intense thirst, while great caution was exercised in giving drink as there was a great tendency to vomit, and after each attack of retching the sufferer was much depressed, evidently on account of the loss of blood. Reaction came on slowly and very imperfectly, notwithstanding artificial heat and stimulants were plied to the full extent. During the night the patient gradually became weaker, and at 11.30 A. M. the following day she died.

Twenty hours after death a post mortem examination was made. On opening the abdominal cavity both fluid and clotted blood was found. After cleaning the coagula carefully away, the fetus could be clearly seen floating in the amniotic sac. The specimen was obtained intact, as will be seen by the plate.

The following measurements were made, viz: dimensions of uterus, $4\frac{1}{2}$ in. length, $2\frac{1}{2}$ in. laterally and $1\frac{3}{4}$ in. in

thickness : length of right utero-ovarian ligament, 3 in. ; left 1 in. The uterus was $1\frac{1}{2}$ in. from the development of the placenta ; placenta 3 in. in width ; attachment of the cord, central. A vertical



incision was made in the uterus, showing the parietal decidua to be lobulated. The frimbriæ on the left side were not developed, while on the right the condition was normal. Upon examining the os, a reddish plug of mucus was found closing the part. The prominent symp-

tombs were all the signs of internal hemorrhage, viz. intense pallor, a weak pulse, which at times were hardly perceptible, an intense thirst which could not be allayed, coldness of the extremities, indistinction of vision, irritation of the rectum and tenesmus. As proofs of an extra uterine pregnancy : local tenderness in the right iliac and umbilical regions, the fact that the woman was in the third month of gestation, a most critical period in these abnormal pregnancies. The intense pain could have been produced by various causes, but in similar abnormalities it is a constant attendant. In addition, the knowledge that the woman had suffered more pain than common and that the morning sickness had been unusually severe, while of little value *a priori*, was of great assistance in making the diagnosis. An examination was made per vaginam and the boggy condition seen in pelvic hematocele clearly revealed itself. As the woman could lie only upon her back, the blood gravitated to the lower portion of the pelvis, and this accounts for the absence of a tenesmus vesicæ. In this instance the ovum was not grasped by the frimbriated extremity, and becoming attached to the broad ligament the fetus developed, having as a covering the amniotic sac alone. All the parts about the ovum underwent an increased growth on account of the greater supply of blood to the tissues. The right half of the uterus was larger than the left, the right ovary was fairly double the left in size, and the right frimbriated extremity was twice as far from the uterus as the termination of the left fallopian tube. The rupture took place at the junction of the amniotic sac with the placenta, leaving a large, free opening, which will readily explain the violent onset of the attack and the speedy termination of the case.

DISEASES OF WOMEN.

Backache and Weak Back in Young Girls
—Treatment.

Dr. WILLIAM R. D. BLACKWOOD (*Medical Bulletin*): Neuralgia and sub-acute rheumatism are quite common amongst children under twelve years of age. The careless method of dressing children, especially girls, gives rise to a considerable amount of suffering which is popularly termed "growing-pains." It is neither reasonable nor philosophical to tax nature with such uncomfortable and unnecessary complications of development; and there is no more need for pains in the epiphysis of growing bones than there is in the hair or nails, and in a well-cared for and healthy child there is no pain. In most of these cases attention to the warmer clothing of the child, particularly as to its feet and legs, the drawers being tightly closed around the pelvis (the usual arrangement being in girls simply an open funnel for collecting cold air), will correct the trouble if done at once, before too much harm is developed; but relief failing, it is well then to put the child on a mild preparation of cinchona, say, the elixir calisaya, with from one-half to one drop of liq. potassa arsenitis in each dose. *Serpentaria* is a valuable remedy in such cases, but it has unjustly fallen out of use. In ordinary cases of muscular rheumatoid affections this will work well, but if the pain does not abate in a short time, *cinchonidia* may be substituted for the elixir; and as the taste is repulsive to any sensible child, the drug should be enclosed in capsules, which are preferable to pills for young patients. If the little patient is anæmic, the best preparation by far is the potassio-tartrate of iron in syrup aurant, which is not at all disagreeable to take.

One great advantage of this is that constipation is not produced by it, and as a promoter of red corpuscles it is, I believe, unequalled.

A very good method to exercise and develop the chest and muscles of the back, is to teach the young lady a little practical housekeeping. Set her to work to make her own bed, to sweep her carpet, not with the labor-saving carpet-sweeping machine, but with a good broom. Make her dust off the bric-a-brac, the pictures, and the hangings; all such exercise brings into play the muscles at fault, and she learns at any rate what she ought to know, even if the chambermaid has to do the work over again after the young lady goes off to the seminary. For those who live in the suburbs, gardening is an excellent recreation and exercise combined.

The remarks just made are intended to apply to young ladies of moderate or well-developed physique who are able to do a fair amount of manual labor. Unfortunately, however, the majority of sufferers from backache are undeveloped, and below par as concerns their muscular and nervous system, and other methods must be employed with them. Passive exercise is here indicated; that is, their muscles must be systematically braced up by other than their own voluntary movement. An excellent plan is the application of massage, morning and night, to the whole body, but particularly to the trunk. The writers on this subject have brought the public to believe that the manipulations needed cannot be done except by experts in private hospitals, or by manipulators sent from these institutions to your homes at heavy expense; and a great deal of twaddle has been expended on the matter, environing it in a maze of French verbiage, which with people with more money than brains does very well.

and is greatly to the advantage of the said experts. The whole performance may be reduced to three movements or actions: rubbing, kneading, and squeezing. The first has been done by every mother for the relief of pain from time immemorial; the second consists in gently pressing and rolling the muscles under the ends of the fingers first, and then beneath the closed knuckles of the hands, until the entire surface has been gone over; and the third is accomplished by grasping as deeply as possible a handful of tissue with one hand, and another with the other hand, and then alternately compressing and relaxing the hold, gradually working from one end to the other of the part gone over. The manœuvre requires little dexterity, it can be learned by any intelligent person in half an hour, and the forcible method in vogue by many professional manipulators is neither necessary or judicious.

To avoid unnecessary friction, and to render the operation more agreeable to the patient, the inunction of some bland oleaginous material is desirable. One of the best articles is cocoa-butter, which is cheap and efficient in developing the needed adipose to round out and make symmetrical the figure. Cosmoline is not so good, as it does not penetrate so rapidly, but it has been much used for this purpose. Oil of sweet almonds is an excellent material, and so in many cases are the oleates, which may be varied from the simple oleate to those containing iron,—for instance, in anæmia; or zinc, lead, or other therapeutic agent, in skin disorders, which are often present in debilitated school-girls.

Of all agents for strengthening and overcoming the weak back of girls from thirteen to twenty years of age, electricity is by all means the most valuable.

Amenorrhœa in young girls should never be neglected for harm is certain to follow sooner or later, not only to the pelvic organs but to the heart, lungs, or brain. I have now under treatment in two hospitals a number of young girls suffering from serious nervous disorders consequent upon amenorrhœa and in the worst of these cases the mothers were told to let the patient alone, "that it would come right after awhile." The menstrual flow in these patients has not "come right" yet, but when it does, I hope to send them home minus their backache, chorea, hysteria, and other neurasthenic difficulties.

Dysmenorrhœa is, of all troubles which afflict young women, the commonest and most difficult to manage by ordinary methods. The backache in these cases is generally a prominent system, and it is rebellious when severe to anything except pronounced doses of anodynes; and as these agents control the pain only in such large doses as to interfere with digestion the added difficulty in already debilitated patients is sometimes as bad, if not worse, than the original cause. To illustrate this point, the following cases are appended:

CASE I. Dysmenorrhœa with Nervous Debility.—A. E., a delicate girl, nineteen years old, consulted me some years with a history of bad neurasthenia. During the entire month her backache was constant, but at the time of menstruation it was almost unbearable. She had dysmenorrhœa, but although she had gone through a radical course of both medical and surgical nature for five years before coming to me, and the morphia, chloral, bromide, etc., had utterly destroyed her appetite and digestion, the painful menstruation persisted. I placed her under galvanism three times a week, and in three months she was discharged cured. The positive elec-

trode was placed on the genito-spinal centre, and the negative for fifteen minutes in the cervical canal, except during the week preceding menstruation, when the current was applied from the centre to both ovaries by a divided rheophore. Nothing else beyond liberal diet was done, and with the attainment of painless menstruation her nervous symptoms disappeared, and she is now a well-developed and perfectly healthy young lady.

CASE II. *Amenorrhœa alternating with Dysmenorrhœa*.—S. R. D., a well-developed brunette, reached her seventeenth year before the catamenia appeared. Although she suffered from severe lumbar and pelvic pain periodically, nothing was done toward establishing her menstrual function, and anodynes were freely used to quiet her at these times, although doubtless nature was trying to "bring her regular," as her mother said. The treatment certainly relieved her pain, it also destroyed her appetite, and she eventually became anæmic, thin, and unable to continue her studies. In her anxiety, her mother brought her to this city, and the physician consulted put her on iron, quinia, and strychnia as a tonic, which not only aided her general health, but doubtless was the means of starting her menses, which appeared some weeks after commencing the tonic. Her general health was much improved, but she was regular as to time only twice, then irregularity occurred, and she would menstruate every two, three, or four months. Finally the dysmenorrhœa, which had been getting worse, constrained another visit to town, and she came into my charge. I ordered her the following, which is a good tonic in spamenorrhœa: *℞*. Strychnia murias, gr. j; ferri quævenne, assafœtida pulv., quinia murias, ext. sumbul, āā 3 j. M. Divide into 60

pills and inclose in capsules. Sig. One four times a day.

It was not convenient to remain in town, and therefore the foregoing was relied on to maintain the menstrual return. This it did. The dysmenorrhœa continuing, was treated by first one-ounce doses, six times a day, of liquor ammonia acetatis, which is often serviceable, but it failed after the first time. I then ordered the following: *℞*. Mono-bromide of camphor, 3 j; ext. conium. gr. xv.; ol. theobroma, q. s. M. Divide into 12 suppositories. Sig. One morning and night.

This did better than the acetate of ammonia, but was not satisfactory, as the backache was unrelieved. I urged her to come for office-treatment, and she at last did so. Galvanism was used three times weekly in two methods. First, the current from twenty gravity cells was passed through the uterus, the anode divided between the centre and the supra-pubic regions, and the cathode to the fundus uteri by a suitable insulated electrode. Next, the bifurcated anodal electrode was applied over both ovaries (externally), and the cathode to the lumbar spine. The sittings were thirty minutes in duration. After this, once each week, central and general galvanization combined were employed for fifteen minutes. She improved at once, and went home well in three months. No relapse has happened in three years, hence the result is considered permanent.

CASE III. *Dysmenorrhœa with Insomnia*.—C. H., 23 years old, commenced menstruating at fourteen, and during the nine years following has suffered severely from dysmenorrhœa. Her backache was seldom absent during the month. No flexion or version existed, but the uterus was larger than normal, congested, and painful when touched.

For the last two years, in addition to the uterine disorder, she was greatly troubled with insomnia, sleep being obtained only toward morning during two-thirds of the month, and, while menstruating, not at all unless through narcotics. Her stomach was pretty well used up by the anodynes, and the opium habit was growing upon her, whilst from lack of sufficient sleep she was nervous, irritable, and steadily failing in physique.

Treatment was begun by discarding all drugs except a little simple elixir four times a day as a placebo. Her constipation, which was a bad factor in the case, was treated by abdominal faradization every morning after breakfast, and a regular visit to the water-closet following. Massage of the abdomen by herself was practised whilst soliciting the stool, and this proceeding overcame the intestinal torpor without difficulty in a short time. The dysmenorrhœa was treated as before described, with the result of completely removing it in three months. Central galvanization was employed every night after retiring to overcome the insomnia, the cathodal rheophore being applied to the solar plexus by a large well moistened sponge, the anode being held in the operator's left hand, and the entire body gently rubbed by the right hand, which method obviates the interposition of the rheostat, as simple pressure of the hand, or a varying grasp of the anodal electrode, modified the current force readily. Within a week after instituting treatment she slept well, and her insomnia vanished long before the dysmenorrhœa was cured.

A good plan for beginners is to procure ten or twelve cells of the Leclanche or gravity type, and add from time to time to the number until at least sixty, or, better, one hundred, are established. These should be kept in a cool closet

or cellar on accessible shelves, and they ought to be arranged in single rows (not behind each other), so that their condition may be seen at a glance. When massed in blocks they may run down from evaporation so as to uncover the zincs, and thus reduce the electro-motive force without being noticed. The lower the shelves the better, they do not dry out so soon as when high up. Look at them every day, and keep the fluid line to the top always. If gravity cells, the lower solution (cupric sulphate) should be blue just half-way up; and if the upper (zinc sulphate solution) gets decidedly yellow, take out a little with a syringe, and add clean water. If the Leclanche element is used, get the prism style, and see particularly that the chloride of ammonium is chemically pure; internal short circuits destroy the anode rapidly if this precaution is neglected. Use perfectly clean sponges, and cover all metallic rheophores with new pieces of muslin for each patient. These may be held in with rubber bands if a groove is cut in the edge of the plate; and cleanliness is required, not only to obviate unnecessary resistance of dirty rheophores, but to preclude the transfer of possible skin affections from one patient to another in these days of micro-germs. Salt water is a better conductor to wet rheophores with than fresh, but with galvanism the peculiar burning is intensified by any saline. Always try the current on yourself first, and a galvanometer should be habitually interposed to measure the dose, just as you use a scale to know the amount of a solid, or a graduate to see how much liquid your patient gets. The numerous accessories can be added to your plant after experience shows their use or necessity. Record your cases, and publish interesting ones. Every young lady you cure in early life will be a friend to

you afterward; and although many hesitate at local treatment at first, their good sense will eventually prevail, and particularly if other instances have come to their knowledge of your success.

Drainage of the Uterus.

Dr. SCHWARTZ considers that the uterus, when affected by a catarrh of the mucous membrane, is in a condition to produce collections of purulent material, the ready relief of which depends upon the rapidity and facility of its discharge. For the past three years he has attempted to establish a perfect drainage in uterine affections, at first employing rubber tubes, but without much benefit; he then used tubes of twisted glass, obtaining a freer and more fluid discharge, but it was always bloody. This was due partly to the thickness of the tube, and partly to a knot made at its inferior portion. Finally he used fine bundles of glass threads, perfectly smooth, with success. He begins his treatment with a very small drain, to determine the degree of uterine irritability, then increases its size as occasion demands, using a drain six to seven centimetres long. At its superior end is a small knot, or it is simply curved to retain it in place; the lower portion is secured by a thread, so that the patient herself can remove it. The tube is introduced by means of a sound, after being covered with a fine layer of iodoform. The length of treatment depends upon the characteristic of the cervix and the results obtained. For mechanical dysmenorrhœa and endometritis the drain remains for months, being changed every three or four weeks. In amenorrhœa or insufficient menstruation the drain is introduced a few days

before the catamenial period, and removed a few days subsequent to it. Dr. Schwartz has found this method very useful in the catarrh consequent upon an incomplete retrocession of the uterus after normal labor or after abortion, the secretion generally increasing a little, becoming more fluid and disappearing after a few weeks. When the uterus does not return to its normal state it becomes much smaller and firmer. The treatment is painless, with the exception of slight colics.—*Centr. fuer Gynæ.—Jour. Am. Med. Ass'n.*

Vulcanized Pessaries from Plaster Casts.

Dr. C. A. L. REED adopts the following method of securing an accurate fit in adjusting pessaries to cases of version or flexion:

He mixes plaster of Paris in water to such a consistency that it can be readily drawn into the barrel of a syringe the distal end of which has been cut off for the purpose. This is then passed into the vagina by means of a Sims speculum, and the plaster is discharged as the instrument is gradually withdrawn. A plug of dry absorbent cotton, which is placed in the syringe before the plaster is introduced, prevents the escape of the plaster from the vagina before it has "set," forms a cushioned lower extremity to the plug, and prevents the formation of sharp corners. When the natural secretions have overcome the astringency of the plaster and loosened it in the vagina, he removes it and has a vulcanized rubber copy made from the cast, just as a dentist prepares a plate for artificial teeth. He has been much pleased with the results obtained by these special adaptations.—*N. Y. Med. Jour.*

Castration for Uterine Fibroids.

We learn from the *Edinburgh Med. Jour.*, that at a meeting of the German Science Association, Wiedow, of Freiburg, opened a discussion on this subject. He suggested that the operation was now thought too little of, because at first it was taken up with too great enthusiasm, and tried in unsuitable cases. He collected 63 reported cases, of which 12 had been fatal. In one of Hegar's cases there was a temporary improvement after operation, lasting about six months, followed by increased growth and a return of the hemorrhage. The patient died a few months subsequently, when the tumor was found to be fibrocystic and to contain purulent serum. In this case, as in a similar one reported by Schröder, the tumor was enormous (kolossal). For such cases the writer would give an unfavorable prognosis. Hegar had operated 21 times with 3 deaths. Of the 18 non-fatal cases 1 terminated as above, while in 17 the result of operation was very satisfactory. Sooner or later the menopause, with shrinking of the tumor, occurred. The writer then showed drawings of Hegar's cases before and after operation, and submitted 4 of the cases for examination. Freund, of Strassburg, reported 6 cases in which he had operated. All had lived, and in five there had been shrinking of the tumors and cessation of the bleeding. In one there had been no improvement. In this case the tumor was "kolossal." Hofmeier, of Berlin, asked what were the indications for castration as opposed to removal of the tumor. Hegar, of Freiburg, said that the size was not the only point that would guide one in answering this question. As regards the danger of the two operations, he said that on an average that of castration was the lesser, though

this was not invariably the case. He always had instruments at hand to remove the tumor if advisable, when he undertook castration for fibroids. If he found a well-developed pedicle, he removed the tumor. He regarded castration as a very efficient operation, and thought it should be recommended before the tumor had acquired great size. Kaltenbach, of Giessen, drew attention to the fact that occasionally the ovaries were situated on the apparent posterior aspect of the tumor, and that thus great difficulty might be occasioned. He reported two successful and satisfactory cases of his own, but drew attention to the fact that removal of the ovaries did not always result in the menopause. Badlehner referred to two cases where decided diminution of the tumors occurred after the natural menopause. Müller, of Berne, had operated in 6 cases, with 1 death and 1 uncompleted operation. In the remaining 4 the result was satisfactory. He regarded castration merely as a resource, and looked on extirpation of the tumor as the ideal operation. Hegar remarked that he had seen fibroids suddenly begin to grow and become cystic after the natural menopause, even in cases where there had occurred some shrinking, just as had been mentioned in the discussion as having followed the anticipated menopause. In all those cases the tumors had been very large, and he would therefore regard the prognosis of castration for very large tumors as doubtful.—*Med. & Surg. Reporter.*

Cervicitis.

Dr. T. J. BASKETT (*St. Louis Med. & Surg. Jour.*): When first seen by the physician, the mucous membrane covering the vaginal portion of the cervix, as well as that lining its canal, is of a deep scarlet

or strawberry color, with extensive abrasions or erosions of its surface, and frequently studded with granular like elevations resembling those seen on the eyelids when affected with granular degeneration, but which are in reality only hypertrophied papillæ from which the epithelium has been washed away by the ichorous discharge from the over-excited mucous glands. Each of these villi contains a loop of a capillary blood-vessel and will bleed upon the slightest touch. The cervix is sometimes greatly enlarged and if it be a case of long standing, it is most commonly indurated. The os is usually patulous, with wide gapping lips sufficient to admit the point of one's finger. From the os a profuse leucorrhœal discharge is escaping, which is generally of a stringy, tenacious character, resembling the white of an egg, but sometimes streaked or tinged with blood. This discharge may be the only ground of complaint, but more frequently the patient will complain of a dragging weight in the pelvic region, greatly increased by any attempts to walk about, and of a fixed pain in the lumbar region or at the base of the sacrum, which is the usual seat of pain of the uterine cervix, as seen in dilatation of the os. From the very free distribution of nerve filaments from the great sympathetic system to the mucous membrane of the cervix, and from the reflex action through the nerves, almost every organ may become functionally deranged, and even disease established in parts remote from the primary seat of the affection, so that the general health may be completely broken down.

Menorrhagia, also, usually exists when the cervix is swollen, soft and spongy, and is sometimes so excessive as to greatly debilitate the patient from the loss of blood occurring at each men-

strual period, and often lasting an unusual length of time.

I will not attempt to compare the relative frequency of exciting causes, but will mention only a few of those found most productive of that condition which we have under consideration. By displacements we may include any of those deviations from a normal position to which the uterus is liable from disease or accident, such as versions, flexions and prolapsions. These may induce inflammation, either from obstruction of the circulation and consequent venous congestion of the parts, or from the constant friction of the os and vaginal portion of the cervix against the walls of the vagina. This is undoubtedly a very fruitful source of cervicitis, and, added, as it often is, to the chafing of a badly fitting or perhaps entirely inappropriate form of pessary that makes undue pressure upon an already inflamed surface, a severe grade of cervical inflammation is engendered.

In speaking of lacerations of the os and cervix, Emmet says: "I doubt if a woman can give birth to her first child without some laceration taking place," but goes on to say "if it is slight it heals rapidly and causes no difficulty afterwards." If this be true, we need not wonder that inflammation of the cervix is so frequently met with. Laceration of the os and cervix may result from a rapid labor, where the head is forced down upon a rigid unyielding os, or it may be caused by the use of forceps, or from the attempts to force the os back from the head before it is sufficiently dilated. Should the laceration not heal before the woman leaves her bed, the angle of the laceration is apt to become the seat of an extensive erosion after she assumes the erect posture, on account of the posterior lip catching on the posterior wall of the vagina, while the ante-

rior lip is forced forward in the axis of the vagina. But should the laceration be rather extensive, and the woman so fortunate as to heal it while in the recumbant position, it will most probably cause no discomfort so long as the health is good and she is in a plethoric condition; but if from some cause she becomes anæmic in after life, the dense cicatricial tissue is almost certain to produce a reflex irritation, which is relieved only by the surgeon's knife or by the absorption of the cicatricial deposit after the menstrual period is passed. Dr. Emmet also says, "at least one-half of the ailments among those who have borne children, are to be attributed to laceration of the cervix." This shows what an important factor this lesion is in causing inflammation of the cervix.

Subinvolution may be caused by laceration of the cervix, by cellulitis and by the displacement of the uterus from laceration of the perineum and prolapse of the vaginal walls occurring after delivery or miscarriage; but perhaps it is produced more frequently by leaving the bed too early than by any other cause.

The speculum affords a means of ascertaining the exact pathological condition of the parts, so that no one shall have any doubts as to diagnosis, when called to treat this affection. But before commencing treatment it is important, if not essential, to know the cause by which the disease was produced. We generally find it complicated with prolapse, inversion, antiversion, retroversion, laceration or subinvolution. There is usually some impairment of the general health, as manifested by functional derangement with anæmia and want of tone in the blood-vessels, and this must be looked after and measures adopted calculated to improve it. Our attention

should be especially directed to the anæmic condition of our patients, since we are told there can be no restoration so long as anæmia exists, because the blood is deficient in those elements by which organic life is properly sustained.

The feruginous tonics are considered the best agents for overcoming anæmia, and these, combined with a vegetable acid, as the citrate or tartrate, are recommended as being better borne by the stomach than other preparations. But the bowels are usually overloaded, and before we begin the use of iron, we must take care to correct this condition, since we can accomplish nothing with iron while the bowels are distended to their utmost capacity by an accumulation of hardened fæces. In this impaired state of the general health and of faulty nutrition, the blood-vessels of the pelvis become dilated from loss of tone and proper nerve stimulus; as nutrition improves there is a corresponding improvement in the tone of these vessels, but much may be done to increase the contractility of these vessels by the direct application of either of three agents—electricity, cold and heat. Heat is the agent most generally used for this purpose. It does not act as promptly as either of the other two, and even produces relaxation at first, but when the application is prolonged, it will effect a contraction that is more permanent in character than that produced by either of the two former. The most convenient method of employing it for this purpose, is the injection into the vagina of water heated to a temperature as high as can be borne by the patient. Under a prolonged stimulus of hot water to the nerves, a reflex action is excited upon the capillaries, causing them to contract and in this manner diminish congestion.

Atthill recommends leeching and puncturing the cervix when it is found enlarged and indurated. He says he never omits puncturing and leeching, except when menorrhagia depending on a granular condition of the cervix is present.

Emmet says he has never applied a leech or scarified the cervix with the view of reducing inflammation; that it is "adding a further source of irritation to this organ, already over congested." He depends mostly on injections of hot water, and the application of iodine.

The diseased mucous membrane must be protected from all friction and from the sanious discharges. The former must be effected by correcting any versions, flexions or prolapsions which may exist, and in maintaining the uterus in its normal position by the use of a properly fitted pessary, while the latter must be accomplished by frequent cleansing injections and by applications of gun-cotton collodion, which forms a protective crust over the diseased surface.

In mild cases of recent origin little else is required, but those cases brought to our notice can generally be dated back several years, and we find the whole substance of the cervix greatly thickened and indurated, and with these such mild measures are unavailing; and before we can make any headway towards relieving the congestion and softening the tissues, we are compelled to use stronger applications to every portion of the diseased parts, and in many instances this must be frequently repeated even at the expense of endangering the mucous follicles. But in cases of long standing, the surface of the uterine canal is usually so covered with granulations or vegetations, that these follicles are protected to such an extent that the strongest acid or even the actual cautery may be used without

injury to them. In making applications to the cervical canal, it is very important that all the viscid secretions covering the mucous membrane be entirely removed, otherwise the surface may be so effectually protected as to prevent our remedies from reaching the parts where we aim to apply them.

An unusual longlist of remedies have been used as topical applications to the cervix, and may be classed as caustic, astringents, alterative and hydragogue. I will attempt to name only such as are in common use. Under the head of caustics may be mentioned nitrate of silver, carbolic acid, nitric acid, chromic acid, caustic potash and the actual cautery. Astringents: tannin, alum, sulphate of copper, acetate of lead, tinct. ferri. chlo. and acetic acid. Alteratives: iodine (simple tincture and the compound or Churchill's tinct.) iodide of lead and unguentum hydrarg. Hydragogue: glycerine.

When both the cervix and body of the uterus are enlarged and quite soft and spongy to the touch, with a patulous os, nothing acts with the promptness of the solid stick silver in checking the great drain which is being constantly kept up by the profuse secretion. Its astringent effect on the small blood-vessels diminishes the supply of blood to the mucous glands and lessens their secretion, so that the erosion may heal. Care and judgment, however, must be exercised so as not to push this treatment too far.

J. Matthews Duncan says "cauterization of the diseased surfaces is the ordinary treatment." He does not condemn its use but says many cases do not yield to it, and that not more than ten applications of it should be made under ordinary circumstances. Byford says, that when it does agree with a case no remedy acts so kindly, so effi-

ciently and certainly as this, but that he had known a number of cases in which the nitrate aggravated the inflammation every time it was applied ; that in aged persons, after the child-bearing period, the disease is almost invariably made worse by the application of nitrate of silver.

That its use is beneficial in many cases of cervicitis, especially in solutions of the strength of ten to twenty grains to the ounce, I believe few will deny, and in fact sometimes nothing seems to act as well in stimulating the parts to healthy action. Some advise that the stick should never be used until the solutions have failed, and then only when the os is patulous. Of the other caustic applications, my experience has been very limited. Atthill lauds the virtues of nitric acid, and claims that by its use he can cure cases of long standing, where the diseased surface is covered with vegetations, much sooner than by any other means. He says, of this condition, "I invariably make use of the strong nitric acid, applying it with extreme freedom to the interior of the uterus." I have never tried this potent remedy except in two cases, and one of these very recently, as I have always endeavored to avoid caustic applications as far as possible. In the two cases in which I have employed nitric acid, I have been satisfied with the results. Both were of long standing. In the former, I had tried various other milder agents without apparent benefit, and after a free application of the acid to the cervical canal the case began to show signs of improvement. It was afterwards treated with applications of glycerine and carbolic acid, and finally restored to health. The second case, according to her own history, has been treated at different times for uterine disease for the last fifteen years. In

this case the acid was applied only about three weeks ago, to both the cervical and uterine cavity, as there was evidently some endometritis. I think the case is doing well. Dr. J. Matthews Duncan, in these chronic cases, relies on what he calls zinc alum as a caustic. He fuses equal parts of sulphate of zinc and sulph-alum together and moulds it into the form of a stick. He recommends the introduction of one of these sticks into the cervix and left there until it melts away, placing a pledget of cotton wool against the os to absorb the caustic as it melts, and thus protect the healthy membrane. It seems to me that this might cause a deeper slough than was desirable.

Of carbolic acid as a caustic I have but little experience, having used the pure carbolic acid but a few times, and cannot say that I was particularly gratified with the trial. I believe the effects from an application of equal parts of carbolic acid and glycerine are more beneficial to the patient, and that it is one of the most useful applications we can use on the diseased tissues of the cervix uteri.

Chromic acid is considered nearly identical in its action to nitric acid, but is less certain in its effects and more irritating, and for that reason is seldom used. Caustic potash is only used where a total destruction of the diseased surface is desired and, on account of the severity of its action, it is only used in the worst cases. After its use care must be taken to wash out the vagina thoroughly with some acid, in order to protect its walls from injury.

After the application of the stronger remedies, the treatment should be continued by the employment of astringents. Tannin and acetate of lead are, perhaps, in more common use than others, and these are usually combined

with glycerine. A saturated solution of plumbi acetate is a favorite topical application with Lawson Tait as a secondary treatment. Tannin, in solution of ten grains to the ounce of glycerine, is preferred by others.

Of the alteratives my experience is limited to the one agent, iodine. It is doubtless in as general use among gynecologists of the present day, as nitrate of silver was in the past, and no doubt but that three-fourths of the cases of inflammation of the uterine cervix may be cured by the patient use of this remedy together with the hot-water injections, if due care is bestowed on the general health. Emmet says "iodine has proved the most valuable of all remedies, and is one which loses nothing of its efficacy by frequent use." It is here classed as an alterative, but its action is not confined to stimulating the absorbents; it also acts as a counter-irritant when applied to an enlarged and congested cervix, and as an astringent to the capillary blood-vessels. It is rapidly absorbed into general circulation when applied to serous or mucous membranes, so much so, that patients frequently detect the taste while being applied to the cervix, and this rapid absorption is supposed to account for its not inflaming these membranes when freely used, as it does the skin. This remedy is especially useful in cases of chronic enlargement, or what Munde calls subinvolution. The ordinary official tincture is not so efficient as the compound or Churchill's tincture.

[It is quite evident that the author of this paper is confused in his views of pathology.

He says that "The os is usually patulous with wide, gapping lips, sufficient to admit the point of one's finger." This is an erroneous statement, which is also to be found in most of the old books

which discuss the diseases of the uterus. The facts are that no such condition ever is caused by "cervicitis" alone. Equally misleading is the statement that "menorrhagia, also, usually exists where the cervix is swollen, soft and spongy. That such conditions of the cervix are often seen in cases of menorrhagia is true, but it does not follow that cervicitis is the cause of the menorrhagia.

In regard to the treatment, there are liberal quotations from several authors with no marked preference for either expressed by the author of the paper. The old and the modern are placed side by side, but nothing original is offered.]

A. J. C. S.

DISEASES OF CHILDREN.

Pertussis and Laryngismus Stridulus.

R̄ Spts. ammon. aromat., gttss. xl.; spt. ætheris, 3 ss; tr. belladonna, gttss. xl.; acidi hydrocyanici dil., gttss. iv.; syrupi, 3 ss.; aqua, q. s. ad., 3 iv. M. Sig.—For a child three or four years of age, a dessertspoonful every four to six hours.—*Mich. Med. News.*

Croton Chloral in Whooping Cough.

Dr. E. A. FARQUHAR, Jr. (*Med. & Surg. Reporter*): In the summer of 1877, we had in our city quite a severe epidemic of whooping cough, and having a number of cases to treat, used everything recommended by all the standard authors, with very unsatisfactory results. My only child, a boy three years of age, was taken with the disease, and the paroxysms of coughing were the hardest I had ever seen. I thought I would try something new, so wrote the following prescription, which acted promptly, and the first twenty-four hours after commencing the

medicine the paroxysms were reduced to two, and were very light: \mathcal{R} Croton chloral, grs. xv.; ether sulph., gtts. xx.; bromid. potass., \mathfrak{z} j.; tr. belladonnæ, gtts. xv.; tr. hyoscyami, gtts. xxiv.; syr. tolu q. s. to make, \mathfrak{z} iv. M. Sig.—One teaspoonful every four hours until better, then only three times a day.

I have treated a number of cases, perhaps more than a hundred, since I first prescribed the medicine, and it has always acted very promptly in relieving the paroxysms, and I feel confident that those who will prescribe it will be pleased with the results.

Germes of Cholera Infantum.

A number of examinations have been made by BAGINSKY to ascertain the presence of characteristic micro-organisms in the dejections of infants suffering from cholera infantum, or in the contents of the bowels after death. He has discovered very large numbers of a bacillus-like formation, and also other germs or low forms of life rolled up in balls and little masses. His experiments in cultivation, however, have not as yet yielded positive results.

Care of Children for Seventy Hours After Birth.

Dr. JAS. F. HIBBERD (*Med. Herald*): There are five salient points in the management of the fresh-born that should be subjects of intelligent criticism, to the end that we may discover what is best in each of them. These points are: 1. Severing the funis; 2. Cleansing the infant skin; 3. Dressing the chord; 4. Dressing the child; and 5. Feeding the child.

As a preparation for this essay sixteen obstetrical authors were consulted, the oldest of them publishing in 1832, and the youngest in 1882, em-

bracing a half century's record. These authors, chronologically listed, are named as follows: Dewees, Meigs, Ramsbotham, Condie, Churchill, Cock, Bedford, Hodge, Cazeaux, Byford, Leishman, Playfair, Atkinson, Glisan, Coles, Lusk. This recital demonstrates that the authors examined were neither obscure nor of low degree in their art. It would not be profitable to consume time in a rehearsal of the separate views of these gentlemen but it may be serviceable to ascertain how many of them coincide on each of the five salient points of my creed as above set forth.

1. As to cutting the cord: Ten direct the cord to be cut as soon as respiration is established, as evidenced by the cries of the child; five advise to wait until pulsation in the cord ceases; and one takes either full respiration or cessation of pulsation as his guide. As to the length of the stump of the cord, one recommends one inch; three one inch and a half; four, two inches; one, three and a half inches; one, four inches: and five give no instructions. As to the number of ligatures, six advise one ligature; five, two ligatures; one, one or two ligatures; and three are silent on the subject.

2. As to washing the child—three grease and give warm bath; two, mild soap and water with egg; two, warm water alone; one, grease and either wipe off or wash off; one, wipe dry; one, strong soap and water after greasing; and six make no instructions.

3. As to dressing the cord—three direct linen with central hole, but say the hole must not be burnt; two, linen with burnt hole; two, linen seven or eight inches by two and a half with hole; one oiled rag and lay on left side; one, soft linen or tape and wrap the stump;

one, greased muslin without hole; and six are silent on the subject.

4. As to dressing the child: There is but little definite on this point. Five recommend in general terms that the clothes should be warm and loose; three direct a single soft flannel gown; and eight ignore the theme.

5. As to feeding the child: Eight advise that the child be put to the breast as soon as the mother is rested; one, in one hour; one, in twelve hours; one, the sooner the better; one, a tea-spoonful of cold water, and then to the breast in two hours; one, to purge with molasses and water; one a few desert-spoonfuls of warm sugar and water; and two leave feeding unnoticed.

It is thus seen that of these sixteen modern instructors a majority of them do not agree on any one proposition of the five offered for consideration. Ten of them recommend to tie and cut the funis as soon as respiration is fully established, but not half the number agree as to the point where it should be cut, nor to the manner of tying and cutting it. On the other four propositions there is still less unanimity of recommendation. It follows, therefore, that a diligent student seeking for accumulated truth in these sixteen volumes would find himself at the end of such investigation, in such perplexity at the contradictions that he would probably conclude that truth was at the bottom of a well.

The Sense in New-Born Infants.

The following is a summary of the inaugural dissertation of GENZMER on the above subject (*Birmingham Medical Review*). He says that the sense of touch is developed from the earliest period, and reflex actions are readily excited

by the slightest stimulation of the nerves of touch, especially of the face, then of the hands and soles of the feet. The feeling of pain is but slowly developed, and is only clearly exhibited after four or five weeks, before which time infants do not shed tears. True muscular sense is at least doubtful. Excitement of the sense of touch gives rise to unconscious reflex movements; the amount, therefore, rather than the quality of the sensation is observable. Closure of the nostrills occasions a reflex dyspnea. Hunger and thirst are manifested in an increased general irritability followed by reflex movements; these cease after the first week. Smell and taste are not distinguishable to infants. Genzmer asserts, in opposition to Kussmaul, that the sense of hearing is perceptible in the first, or at most the second, day of life. New-born infants are so sensitive to light that they will turn the head to follow a mild light; while if strong glare be suddenly thrown upon the eye, squinting is induced, and even convulsive closure of the lids. After a few days the child will follow the motion of various objects by movements of its head. Between the fourth and fifth weeks the convergence of the pupils and the power of co-ordination in vision are perceptible. A distinct perception of color does not exist under four or five months; before then it is quantity rather than quality of light that is recognized. The inhibitory reflex center is not yet developed in the eye; weak and moderately strong irritation excite movements which subserve that purpose. Excessively strong impressions only excite passive movements. New-born infants cannot separate the impressions on their organs of sense. The readiness of excitability is shown in the fact that the stronger the stimulation the shorter the physiological interval.

OBSTETRICS.

Prevention and Treatment of Puerperal Fever.

Dr. E. L. PARTRIDGE thus concludes an interesting article in *N. Y. Med. Jour.*:

We encounter more cases of puerperal fever in hospital than in private practice, and it is in the former that prophylaxis becomes a question of great moment. An atmosphere uncontaminated by germs such as are developed by surgical cases, and those of zymotic poisoning, as well as by previous cases of puerperal fever, is necessary to the safety of lying-in patients. Inasmuch as the poison can be conveyed from place to place, physician, nurse, laundress, and visitors to the sick room should exercise great care lest they be the bearers. Bedding, clothing of attendants, hair and whiskers, instruments, hands, and especially fingernails, are the media by which the poison may be conveyed to the patient. In prolonged labors it is necessary—in all cases proper—to employ disinfectant vaginal injections during labor. After labor, and in advance of septic indications, their not too frequent but judicious use is called for. The proper management of the third stage of labor, looking to the complete expulsion of secundines and clots, and to permanent uterine contraction, is important in the prevention of both auto- and hetero-inoculation.

In puerperal disorders which, in their inception, are not complicated by septicæmia, treatment does not differ essentially from that suited to cases of the same nature unconnected with parturition, except that special care is necessary, on account of the tendencies of

lying-in women, to use the disinfectant douche, and to promote escape of pus from mucous surfaces and from abscess cavities. In cases of septicæmia, by the same means we avoid accumulation of the poison germs and reinfection. When the point of inoculation is in the uterine cavity, or when we know that this cavity contains decomposing fluid, warm and carbolized intra-uterine injections should be repeated every few hours and they will usually cause prompt fall of temperature. Care is necessary that the injections be made slowly, and the liquid be freely allowed to escape so as to avoid dangerous uterine distension, extension of the fluid into the peritoneal cavity, shock, and retention of poisonous material.

Sloughing tissues should be removed as early as possible, and contiguous, exposed surfaces should be covered with iodoform, in powder form or suspended in glycerin, in a ten-per-cent. mixture, or touched with carbolic acid, or with tincture of iodine.

In local or general parametritis the early use of leeches may lessen the extent of inflammation. When exudation is present, vaginal injections of hot water (110° F.) hastens its absorption, and external application of heat, as by poultices, is proper when the situation of the pelvic inflammation makes it practicable. Pelvic abscesses should be treated by aspiration or incision. In peritonitis, light warm poultices of bran or flaxseed are advisable.

Medicinal treatment should consist of opiates to relieve pain, quinine, judiciously, for its antipyretic and supporting effect, and stimulants when indicated. Food should be concentrated, nutritious, and easy of digestion. The importance of maintaining unimpaired digestion cannot be overestimated.

General blood-letting at any stage of septicæmia is improper. Arterial sedatives, as aconite or veratrum viride, may be useful in certain cases characterized by circulatory excitement, yet their depressing effect is so easily reached, and such close observation during their use is necessary, that great caution should be displayed with them, lest they be administered too freely or in unsuitable cases.

Salicylic acid, as well as quinine, given in large doses, may reduce temperature, and the wet pack, with careful avoidance of its depressing effect, is similarly suitable.

Tympanites, when excessive, causes pain, and a depressing, reflex influence on the nervous system.

Stimulating enemata containing asa-fœtida and turpentine, or even abdominal puncture of the intestines by fine aspirator needles, will afford some relief.

Rigidity of the Anal Muscles a Cause of Laceration of the Perineum in Labor.

Dr. CHARLES H. CARTER (*Obstet. Gazette*): It is evident at a glance that the small, weak muscles of the perineum proper, though they are the ones lacerated, can offer but slight contractile resistance; and, moreover, they are quite elastic in the great majority of instances, so that if they were the only obstacles to overcome, the muscular fibres would readily relax, and the fibrous network protect the muscle, while it could retreat as the head advanced. But there is a powerful muscle behind and above these weaker ones which is the *casus mali*, preventing the perineum proper from retreating, and accountable for its destruction. The levator ani, the main plank in the floor, is the offender. By its attachments, its action is

necessarily as an elevator, not only of the anus, but of the whole pelvic floor. By the intimate interlacement of its fibres with those of the transversus perinei and sphincter vaginae, relaxation of the latter muscles produces little, if any, enlargement of the vaginal opening.

The other anatomical *sine qua non*, the sphincter ani, plays also a very important role. Its comparatively stationary attachment being posterior, its contraction causes the perineum to recede, while it is itself drawn upward by the levator ani.

Now, in order that the perineum may most certainly avoid injury by the escaping head, it must retreat downward and somewhat forward. This it easily does when it is distensible, provided the levator ani and sphincter ani remain in an uncontracted state.

The hyperæsthetic state of the muscles may be tested by, in a manner simulating the action of the child's head upon them. When the labor has well advanced, and the head so far descended as to be well engaged and is making satisfactory progress, two fingers well lubricated with carbolated vaseline are hooked into the vagina, and during the pain the perineum pressed directly downward, separating the fingers as far as possible, so as to distribute the pressure and act upon the posterior as well as lateral fibres of the levator ani. If there is marked "irritability" of this muscle, it will be felt to become more or less rigid as the pressure is increased, and relaxed as the pressure is withdrawn. If the test shows the presence of the hyperæsthetic state the following procedure may be employed to "prepare" the parts for the final act: At the beginning of each pain the two fingers are introduced as before, and the perineum drawn downward gently at first, but gradually more

strongly as the pain increases, and lessening the traction as the pain subsides. This is repeated till but little force is needed to dilate the vaginal orifice sufficiently to admit three and then all four fingers with ease. By this time the anus is patulous and the sphincter exhausted. Drawing the perineum backward leaves this latter muscle in its pristine tonicity, and the levator in the greater part unexhausted. Thus the sphincter is ready to draw the perineum violently backward, and the powerful action of the levator draws it upward just at the moment when the whole pelvic floor should be in a state of complete relaxation.

In cases where the muscles are excessively hyperæsthetic, the thumb may be used in conjunction with the fingers, introducing it into the rectum after the sphincter has become relaxed. Mock modesty under such circumstances is reprehensible. There is nothing indelicate in this procedure when the welfare of the woman demands that nothing should be left undone which promises her security against injury. By using the thumb in this way, separate segments of the levator may be successively acted upon, and the exhaustion rendered more complete.

This "tiring out" of the anal muscles causes no apparent increase in the woman's sufferings, being done during the pains. The manipulations are carried out at a time when she is begging the physician to help her, and when the pains are strong she will hardly know that he is "helping" her, even when he has all the fingers in the vagina and the thumb in the rectum, firmly drawn downward.

After the muscles are thus exhausted, labor should be completed as soon as possible. If the pains are becoming weak and inefficient, the forceps may

be applied at once, but if there are good pains and everything favorable for a speedy completion of the birth, the best way to keep the muscles relaxed, and also to excite the pains to still greater efficiency, is to keep the hand in the vagina, thus distending the perineum, and just before each pain begins, insinuate a finger between the head and the bony pelvis at the point where the pressure is greatest, and as the pain comes on, indent the cranial bone at that point, and slowly withdraw the finger and permit the head to descend. Repeating this process with each pain, the head is teased along until it escapes from the osseous vice. At the same time it is guided in the proper changes of flexion and rotation, the pains are excited and the labor hastened towards completion, and the attendant is not merely bustling about with a pretense of doing something, but is, in fact, *helping* the sufferer.—*Med. News.*

Cotton Dressing for the "Cord."

S. W. CALDWELL recommends to practitioners in the south, cotton lint just as it comes from the gin for a dressing to the umbilical cord of new born infants. He has used it for fifteen years, he states, with great satisfaction. Taking a clean bunch and freeing it from the faulty seed or motes he passes it for a moment over a flame, then molds it around the finger, lays the cord in the depression, folds the cotton around it, and either applies the binder or simply wraps a narrow strip of muslin around the cotton covered cord without any binder.

He thinks this a very good substitute for the more expensive prepared "absorbent cotton" which he regards as perfection itself.—*Miss. Val. Med. Mo.*

DISEASES OF WOMEN.

A Peculiar Operation for Vesico-Vaginal Fistula.

In the *Medical Times*, Dr. T. PICKERING PICK reports a case of vesico-vaginal fistula, occurring in a woman aged 25, subsequent to an operation for stone. Several operations had been performed for the relief of the fistula, but without avail, as the orifice would not close. A recto-vaginal fistula subsequently formed. She came under his care in May last. The vesico-vaginal fistula was of very large size, freely admitting three fingers; in fact the whole of the posterior wall of the bladder appeared to be gone. The lower wall of the urethra had also been destroyed, so that no remains of the canal persisted. The edges of the fistula were healed. The recto-vaginal fistula was of small size, large enough to admit a goose-quill, situated about two inches from the anus. The tissues around were dense and cicatricial.

In spite of the unpromising nature of the case, he made an attempt to close a part of the vesico-vaginal fistula, hoping by a series of operations, to gradually succeed in closing the whole of it. In spite of free lateral incisions, however, the amount of tension on the sutures was so great, owing to the scarcity of tissue, that they speedily gave way, and not the slightest benefit was obtained. She was in a most miserable and desponding condition, emaciated, with a wan and anxious expression, and willing to submit to any operation which would rid her of her constant trouble and annoyance.

Accordingly, on October the 18th, the patient having been placed under the influence of ether, and in the lithotomy position, he dissected up a circular belt of mucous membrane from the inner

surface of the labia minora, just within the orifice of the vagina. By this means he laid bare a surface, an inch in depth, completely round the vagina. He introduced a curved pewter tube through the recto-vaginal fistula, from the vagina, so that the end protruded out of the anal orifice. The raw surfaces were now brought together with three deep quilled sutures, and five superficial silver wire sutures, so that the orifice of the vagina was completely closed.

After the operation she suffered considerable pain, but otherwise did well. The quilled sutures were cut on the fourth day, and removed on the sixth. On October 30th (the twelfth day after the operation), she was placed under the influence of ether, and the silver sutures were removed. The tube was also withdrawn from the rectum. The whole of the wound was firmly united.

One other point in connection with the case requires consideration, and that is, whether he did right in performing this operation. It seemed to be impossible to close the large opening which existed, and the only other proceeding which suggested itself was inapplicable in this case, and that was to sew the lower margin of the fistula to the posterior wall of the vagina. She would then have menstruated through her bladder, and, of course, would have been incapable of bearing children, but, no doubt, would have been able to fulfill the duties of married life. This plan has been suggested as a remedy, in these cases of extensive destruction of the posterior wall of the bladder, but was not applicable in this case, because there was no urethra, and, therefore, there would have been no power of retaining the urine. Besides, it would not have dealt with the recto-vaginal fistula. Of course, the proceeding condemns the patient to a life of celibacy, and this had to be ex-

plained to her before commencing the operation; so great, however, had been her sufferings during seven years of incontinence of urine, that she willingly consented to anything that was suggested which would rid her of her infirmity.
—*Med. & Surg. Reporter.*

On the Operative Treatment of Uterine Fibro-Myomata.

J. KNOWSLEY, M. B., C. M., *British Medical Journal*:

1. *Subperitoneal Fibro-Myomata.* — These may be single or multiple, pediculate or sessile. They rarely occur alone, but are more generally accompanied by intra-mural growths, or general enlargement of the uterine wall. When they do occur alone, they seldom lead to the necessity for operation, but they may do so in certain exceptional cases. If single and pediculate, they may be removed with as little or less danger than that which attends a simple ovariectomy. Such operations are purely operations of expediency. The small amount of danger attending them would render them more often justifiable, were it not for the fact already alluded to, that these outgrowths are frequently accompanied by intra-mural growths; and it is often impossible to make a perfectly certain differential diagnosis as to the presence or absence of these accompanying intramural growths. If multiple and pediculate, they may still be removed with but little danger; but the same or increased difficulties in accurate diagnosis present themselves, and the presence of intra-mural growths may either lead to an imperfectly curative operation, or to the performance of a much more dangerous one than the patient and her friends had been led to expect.

2. *Intramural Fibro-Myomata.* —

These may also be single or multiple, and are more apt to give rise to a combination of symptoms, which justify surgical interference. I would include in this group those general enlargements of the uterine wall which we frequently meet with, because it is often quite impossible to distinguish between multiple intramural growths and this general enlargement, and also because the same surgical treatment is suitable for both conditions.

3. *Submucous Fibro-Myomata.* — These, again, may be single or multiple, and may be complicated by the presence of either of the other varieties. Usually, however, it is a single growth which makes itself so obnoxious that it calls for surgical interference. When this is the case, rapid dilatation by means of Hegar's wooden dilators, and immediate enucleation, is the plan which I advocate. I always take the precaution to thoroughly cleanse the vagina, and, if it be possible, the uterine cavity, also, by antiseptic irrigation, before I commence dilatation; and, after the removal of the growth, I thoroughly sponge out the wound and uterine cavity with pure tincture of iodine, before using perchloride of iron, if that should be necessary to arrest hemorrhage. Since adopting the rapid dilatation and the free use of iodine, I have never had the smallest anxiety after enucleation.

It will often happen, however, that after the successful removal of a submucous growth, which one hoped was single, another or others will present themselves, and they may slough as the result of the first operation, and give rise to much trouble and anxiety. I am, therefore, more and more inclined to abandon the vaginal treatment of these cases, unless it is quite clear there is only a single growth, or unless the growth has already so thinned or

destroyed the mucous membrane before the patient seeks advice, that it has left one no choice. I shall allude to this subject again, when speaking of the removal of the uterine appendages, or perhaps I may as well say at once that I believe the majority of this class of cases are better treated by this latter operation, certainly so if the growths are multiple.

Having thus briefly noted the chief varieties of growth, I will return to class 1. We occasionally, but rarely, meet with large pediculate, subperitoneal fibroids, which we are able to diagnose as such. I think that if in any such case we can be quite certain of our diagnosis, and can define a fair pedicle, we are justified in recommending the removal of the tumor, even though it may only cause inconvenience at the time our opinion is asked. I have already pointed out that the operation is one which is easy of performance, and attended with little risk, and very likely it is a matter of much moment to the patient to get rid of the unsightly swelling. I have recently operated in such a case with perfect success. The lady was a young governess, and her size was a very serious inconvenience to her, and threatened to deprive her of her calling in life, from the unkind suggestions it called forth. I have operated twice before under similar circumstances, and all three patients have recovered without trouble of any kind. In each case, one large and main tumor was removed, and from one to three smaller outgrowths, and a healthy uterus was left behind. In one case I found a small cystic tumor of the left ovary, and removed it also. The pedicle of these growths may be treated by the cautery, the *serre-naud*, or the silk ligature. I much prefer the latter, but will give one caution as to

the method of applying it. If the pedicle be transfixed, as in ovariectomy, hemorrhage from the puncture is very liable to occur, and very difficult to control. I therefore first secure the pedicle by a ligature tied firmly round the whole of it, then threading an end of this ligature through the needle again, transfix the pedicle on the distal side of the first tie, and proceed to ligature in halves, or smaller pieces if necessary. This method renders slipping of ligature or hemorrhage from puncture impossible.

We have now to consider class 2, the most important of all in the present connection, because it is the intra-mural fibro-myomata which most often lead to the necessity for the greater surgical operations. Operations for the removal of such growths by abdominal section are, however, far more serious and dangerous than those we have been considering. In the present class of cases, the operation nearly always involves the opening of the uterine cavity, and we are at once exposed to the risks of septic conditions. The result is seen in an immensely increased mortality—a mortality so great that we must pause here and carefully consider what are the conditions which justify us as surgeons in performing these formidable hysterectomies and partial hysterectomies. There can be no doubt that, since it has been generally recognized that operations in which the uterine cavity is opened should be concluded by bringing all the cut surfaces outside the peritoneum, the mortality has sensibly decreased; but it is still far too heavy for these operations to take rank along with ovariectomy, even if the diseases for which they are undertaken were as certainly deadly as ovarian tumor. Those operations involving the opening of the uterine cavity should

not, in my opinion, be undertaken unless the life of the patient is actually in danger from hemorrhage, rapid growth of tumor, or interference with the function of the bowel or other vital organ. I trust that one outcome of this discussion will be to reveal the true mortality of these formidable operations, and check their too frequent performance.

There are two methods which aim at the same end, viz., the complete exclusion of wounded surfaces from the peritoneum. One method is by suture, the raw surfaces being turned into the uterine or cervical cavity, the other is by some form of clamp or *serre-nœud*, the raw surfaces being brought out between the lips of the abdominal wound. Both methods have their advocates, and the former may sometimes be adopted when it is impossible to apply clamp or *serre-nœud*; but I have no hesitation in strongly advocating the use of the *serre-nœud* (Kœberle's is a very good one) as the safer and better plan of the two. I have performed partial hysterectomy three times, and all the patients died. Once I used the Well's ovariectomy-clamp, and it caused a slough which extended in the walls of the uterus, and caused death by septicemia; then I tried ligatures and sutures of the flaps, and the patient died of septicemia; then I tried simple ligatures applied by transfixion, and the patient also died of septicemia. I shall not again, in any case, attempt a partial hysterectomy, as I am convinced it is both safer and easier to remove the whole organ, and deal with the cervix instead of the uterine wall.

I have performed complete supravaginal hysterectomy twelve times, on each occasion removing both ovaries. The first three cases were treated by transfixion, ligature, and dropping of the cervical and ovarian pedicles. The first

recovered and the other two died—one of septicæmia, and one of hemorrhage from slipping of one of the ovarian arteries. The next case I treated by Well's clamp, applied so as to include the cervix and both ovarian pedicles. She made an excellent recovery. In the next case I was obliged to use ligatures, and after a good deal of fever and trouble, she made a good recovery. Then came a hopeless case, in which the bladder was opened and an enormous tumor enucleated, vessels being tied where they bled. She sank in a few hours. Then came two cases in which I was able to use Kœberle's *serre-nœud*, and both made good recoveries. Then came one in which I did not intend to perform hysterectomy, but got such hemorrhage from a tear in removing adherent appendages, that I was obliged to go on and remove the uterus. I used the *serre-nœud*; but it was impossible to bring the stump up into the incision, and I attempted, by sewing the peritoneum round it, to make a half intra- and half extra-peritoneal arrangement. I have once again attempted this plan, and both cases have died of septicæmia; so that, if ever I find myself in like difficulties, I shall remove the wire and use ligatures and suture of the flaps.

I feel sure that, with a little more experience, we shall be justified in recommending the removal of the appendages in cases which are troublesome from hemorrhage, pain, etc., before they grow large enough to raise the question of the more dangerous operations. My experience has at present been limited to fifteen cases; but I have selected them with care, not only as cases likely to be cured by the operation, but as cases which, from their variety, would demonstrate its scope. All the fifteen patients have recovered; ten have en-

tirely ceased to menstruate, and have entirely lost their tumors; one still has some irregular menstruation, but the tumor is a third of its size at the time of operation, and, from its condition, I feel certain will soon disappear; one has had no return of menstruation, and the tumor is going fast, but it is yet too early to expect its disappearance; one has continued to menstruate, and the reduction in size is not very marked, but she no longer floods and she has lost her pain. In this case, I removed two cystic tubes, and was unable entirely to remove one of the ovaries. Two other cases have been operated upon too recently to speak of with any certainty as to the future, but they both promise well.

I would remark here that the case to which I have just referred, together with one in which I removed both tubes for pyo-salpinx, and left both ovaries, seem decidedly opposed to the notion that the tubes influence menstruation. The tubes were thoroughly and closely removed in both cases; but in one about two-thirds of one ovary was left, and in the other both ovaries were left, and both patients continue to menstruate regularly. In calling attention to this fact, I am, however, far from wishing to imply that I consider it a matter of no moment whether the tubes are removed or not. I believe that, in order to obtain good results, not only must the ovaries and tubes be thoroughly removed, but they must be removed in such a way that the blood-supply to the uterus is very materially influenced by their removal. In other words, the ligatures which transfix the broad ligaments must be so applied as not only to enable us to cut the ovaries and tubes away safely, but, at the same time, to cut off from the tumor the very important blood-supply which it obtains from

the enlarged ovarian, tubal, and other vessels.

My paper must briefly record the reasons which have induced me to remove the appendages in the fifteen operations I have performed.

The first was hemorrhage; the second, rapid growth of multiple sessile fibroids in a young servant girl; the third, fibro-cyst of the uterus so involving even the cervix that Freund's was the only other possible operation—I opened the cyst, and left it to drain into the peritoneum; the fourth, fifth and sixth were for hemorrhage and pain; the seventh was commenced as an exploratory operation, a soft fibroid growing rapidly, and thought possibly to be a recurrence in an old ovarian pedicle; the eighth and ninth for hemorrhage; the tenth, for rapidly growing intramural growths in a patient with phthisical history and tendencies; the eleventh and twelfth, for hemorrhage and pain; the thirteenth, for life-long invalidism from multiple tumors, blocking the pelvis and extending high up into the abdomen; the fourteenth, for small fibroid with intense menstrual suffering (membranous dysmenorrhea); and the fifteenth, also for a small fibroid and ovarian pain, causing permanent invalidism. In several of the cases, cystic ovaries or tubes, or both matted together, were encountered, and in some the adhesions made the operations very difficult.—*Obst. Gazette.*

Removal of the Ovaries for Confirmed Masturbation.

Clinical Lecture by Dr. WM. GOODELL (*Med. Times*): Three weeks ago I had this patient before you, and told you before she came in what a sufferer she had been, and told you that I should perform oöphorectomy. The operation was done eighteen days ago. In this patient

there was considerable fat, so that, in order to obtain a sufficient opening the incision had to be extended high up. On the other hand, I do not like to have the patients too thin, because loss of flesh means loss of vital power, and such women are not so likely to survive the operation. There has been since the operation an amelioration of the symptoms, and I think that she will continue to improve. Since last May it has been necessary to employ a catheter. I think that in time she will regain control over her bladder, and this difficulty will be overcome. It is a nerve symptom, and is due to a contraction of the muscular powers surrounding the urethra.

The operation of oöphorectomy is performed in the following manner: The spray producer is set about six feet from the patient and the spray directed over the wound, not so as to drop into the wound, but so as to go directly over it and carry away or destroy any germs that may fall from the air. The instruments are placed in a tin pan and covered with a five per cent. solution of carbolic acid. Just before the operation, hot water is added, reducing the strength of the solution to two and a half per cent. The sponges are put into a warm solution of the latter strength. The incision is made in the linea alba with considerable boldness until the peritoneum is reached. It is recognized by the overlying fat. All bleeding points are caught with pressure forceps, and there may be a dozen of these dangling from the wound at one time. The rule is to stop all bleeding before the peritoneum is opened. A great deal of caution must be exercised in opening the peritoneal cavity. This operation is more difficult than ovariectomy, for the intestines are immediately under the wound. If an intestine were glued to

the peritoneum, it might readily be opened. This accident has repeatedly happened. Almost all the gentlemen who perform oöphorectomy have opened the intestine. So far I have not had this accident occur. I open the abdominal cavity in this way: When I get to the peritoneum, which I recognize by its blueness, thinness, and tendency to bulge into the wound, I catch hold of it with a tenaculum. I take a very superficial hold of it, raise it up, and, cutting laterally, make a little nick on one side. In this way I make a minute opening and can see whether or not I am in the abdominal cavity. I then enlarge the opening with a director and scissors, or, as I consider the better way, introduce a finger and cut on it. Having done this, two fingers are passed in, and the position of the fundus of the womb is determined. The fingers, one on each side of the broad ligament, are then passed down, and the ovary is caught between them and brought far enough up to be grasped with the forceps. Sometimes the ovary eludes the fingers; it then has to be caught with the fenestrated polypus forceps. The ovary having been brought to the external wound; the broad ligament is transfixed with a double thread, low down, and ligatured on each side. Then the ends of one ligature are brought entirely around the stump and again tied. The stump is caught with a small pair of forceps and the ovary removed. The pedicle is next examined to see if it is sufficiently long, and whether there is likely to be any bleeding. The same thing is done with the other ovary. I usually pass a sponge into the cavity of the abdomen, to catch any blood that may escape. The ovaries being removed, a small sponge, held by forceps, is passed into Douglas's cul-de-sac, to remove any blood that may be

there. In closing the abdominal wound threads eighteen inches long, armed at each end with a needle, are used. These are kept in a five per cent. carbolic acid solution. They are passed from within outwards. This is done for three reasons: 1, if passed from the outside and the patient should happen to cough, the intestine may be wounded; 2, if the needle become blunted, it may strip off the peritoneum without penetrating it, and 3, as the peritoneal is the vulnerable surface, it is desirable to have the stitches placed there as neatly as possible. The needles are passed about one-fourth of an inch from the edge of the peritoneum, and about the same distance from the edge of the skin. The mistake which beginners make is to include too much skin. I used to include half an inch. If this is done, the edges do not come into close coaptation, but pucker. While the stitches are being inserted, a sponge is kept in the abdominal cavity, directly under the incision, to prevent blood from getting into the cavity. When all the stitches are in position, the ends on one side are brought together, twisted into a cord and grasped with forceps. The same thing is done on the opposite side. One finger of each hand is placed in the wound, and the sutures separated. A careful examination is then made to see whether or not there is any collection of blood in Douglas's pouch. All sponges are then removed, and the edges are brought together by pressure in order to chase out the air, and the sutures are rapidly tied. After tying, the ligatures are cut off, leaving ends an inch and a half long. The wound is dressed with carbolic acid and glycerin, as before described.

The after-treatment consists in giving no food for twenty-four hours. Milk in tablespoonful doses is then cautiously

allowed. I tell the patient that if she feels inclined to break wind she is not to restrain herself on account of the presence of any one in the room. The escape of wind from the anus is in these cases a most welcome sound. It indicates that the intestines are not paralyzed, that there is no peritonitis, and that there is to be no collection of air in the intestine. Tympanites is in these patients a very distressing symptom, and sometimes requires the introduction of the catheter into the bowel.

Ovariectomy, with Abscess of the Abdominal Wall.

Clinical Lecture by Dr. Wm. GOODELL (*Med. Times*): This case is one of ovariectomy on which I operated three weeks ago. The wound has healed in every respect but one. This occasionally happens in spite of antiseptic precautions. I refer to the development of little abscesses along the suture-tracts. These heal up rapidly. I used to attribute their formation to the inclusion of the fibres of the recti muscles in the suture, but I do not now think that this is the true explanation. The abscesses are probably due to the bruising of the parts by the pressure-forceps. All of these cases have recovered without a bad symptom. This patient has lost considerable flesh, and, although only 48 years old, looks much older. These furrows about the forehead and lines about the eye are characteristic of the *facies ovariana*. In fibroid tumors this expression of countenance does not exist. There is usually then a brown discoloration of the skin. A woman with a fibroid tumor has also a tendency to become fat, or at any rate she is in pretty good condition, and does not emaciate like a case of ovarian tumor. Strange as it may seem, the loss of blood

tends to the production of fat, but the fat is of a flabby kind. In some parts of Europe it is the custom of butchers to bleed the calves in order to render the veal white and fat.

In this patient both ovaries were diseased, and were accordingly removed. Here is a point which is an indication that both ovaries were affected. She has, as you can see, considerable hair on her chin and upper lip. In women past the climacteric, whose ovaries are shriveled and shrunk, a beard develops, but here is a comparatively young woman, who should not have a beard. This is due to the condition of the ovaries.

I here show you the temperature-chart of this woman. The evening after the operation the temperature was 98°; the next morning 100.6°. It then continued normal until the abscess developed, when it ran up to 100°. The disturbance has not been as great as would ordinarily follow the amputation of the little finger. She was kept twenty-four hours without anything to eat. Sometimes I give nothing for thirty-six hours except a little cracked ice, and if necessary, occasionally a teaspoonful of good brandy or whiskey. She then received a tablespoonful of milk every two hours. The next day the quantity was increased to two tablespoonfuls, and the next day to three tablespoonfuls every two hours, the quantity being gradually increased. She has now an excellent appetite. The loss of flesh is due to the abstraction from the blood of the rich constituents of the fluid. I have known an ovarian cyst after being tapped to fill up at the rate of a pound a day, which meant the loss of nearly one pound of blood each day.

She is now taking strychnia in the form which we term the "lemonade iron." It is prepared as follows: \mathcal{R} . Strychninæ sulph., gr. $\frac{3}{4}$; tinct. ferri

chloridi, 3 iv.; acidi phosphorici dil., 3 vi.; syrupi limonis, vel simp., q. s. ut ft., 5 vi. M. Sig. A dessert-spoonful after each meal.

This preparation of iron is very good for children. I give one minim for each year of age. Iron in a fluid form is, I think, more readily assimilated than when given in pills. The objection to the tincture is that it injures the teeth. The precaution should be taken to have the medicine well diluted and taken through a glass tube and the teeth well brushed with soda and water.

Clinical Gynæcological Observations.

Dr. C. C. VANDERBECK (*Med. & Surg. Reporter*): These "*Observations*" are based upon a recent service at the "Obstetric Department" of the Philadelphia Dispensary, Fifth street, below Chestnut, Dr. Jos. Price being the present physician-in-charge of this department.

As the title infers, minute history and extended remarks on individual cases are not the intention of this article, but rather practical hints, wrinkles and reflections.

In the first place, then, in regard to the instruments and methods of examination.

The examining table has of late been discarded and a chair introduced, combining beauty, ornamentation and convenience. It can be used both as an office chair and an operating or examining surface. To those who would like some idea of the mechanism of this chair, I will try to give a description as best I can, some time during the progress of these observations.

The *bivalve* speculum is almost exclusively used, and the *trivalve* almost completely condemned. In very many cases a lax vagina will so fall in the blades of a trivalve as to make a thorough

examination of the os difficult. The examination is made with the patient lying upon her back; the side position only being used when the rectum is examined. Absorbent cotton is used freely, both for cleansing purposes and also to make the medicated applications. A number of balls, about the size of a plum, of this cotton are kept made up, a string tied around their centre, and left attached for a number of inches. These are used as plugs, medicated in various ways, particularly with boracic acid and glycerine solution, to be mentioned presently.

Dr. Price has had made for his cotton a unique instrument, by which after an application of iodine or other substance to the uterus, the cotton can be forced off the instrument without touching the fingers to it, and thus obviating soiling the hands, as well as the tugging and pulling required as when the cotton has been twisted around the ordinary uterine sound.

Some of the standard solutions and preparations kept always ready for uterine medication are as follows:

1. Carbolyzed oil. 2. Cosmoline. 3. Glycerine of acetate of lead, made thus: \mathcal{R} . Plumbi acet., 3 j.; glycerine, \mathfrak{z} j.
4. Tr. iodine. 5. Nitric acid. 6. Ointment of iodoform the strength of forty-three grains to the ounce of cosmoline.
7. Iodoform powder. An ordinary bed-bug powder gun is kept loaded with this, to shoot it into foul ulcers, chancroids, etc.
8. Iodine and glycerine.
9. Iodine and carbolic acid.
10. Last but not least, boracic acid and glycerine—boro-glyceride, as it is called. This is thought to be very superior to ordinary borax in glycerine. It is made with much difficulty, and should be manufactured in a very careful manner. The directions for making it will be given presently.

Some other favorite remedies here used are:

1. Black wash as an application on cotton for chancroids, and for vulvitis. The cotton should be well packed between the labia, and a bandage worn, if needed, to keep the application in situ.

2. The favorite stomach mixture is acid, nux and gentian *before* meals, and pepsine *after* eating.

3. Home-made liniment is recommended to the poor, of this character: Turpentine, $\frac{1}{2}$ cup; vinegar, 1 cup; 1 egg. M. Put it all into a bottle and shake well.

4. The favorite prescription for sub-involution is bromide of potash and wine of ergot in suitable doses.

5. A useful acid mixture is this: \mathcal{R} . Acid. nitro. mur. dil., \mathfrak{M} . xx.; tr. aurantii; syr. limonis, aa 3 ss.; spt. chloroform, gtt. x.; aquæ, \mathfrak{z} j., M. S.—One dose one-half hour before eating.

6. Fluid extract of hamamelis for varicose veins is highly lauded, and, it is claimed, has made some really gratifying cures in this department. A drachm is given three times a day.

7. This prescription for "morning sickness" has stood the test of experience: \mathcal{R} . Tinct. iodine; acid carbolic, aa \mathfrak{M} . xvj.; syr. acaciæ, \mathfrak{z} ij. M. S.—One teaspoonful every four hours.

8. Powdered borax is the favorite powder for use in the injections ordered.

The manner of giving an injection is carefully directed, and its exact carrying out insisted upon. The patient must lie on her back, and use a quart of warm water—the first half without any medicine in the water, the last half adding one teaspoonful of powdered borax. The use of a syringe in a stooping position is always discouraged, and declared to be of little or no value.

In making the digital examination,

the finger must be entered boldly, so to speak, with a determination to find out all possible tenderness, mobility, size, capacity, secretions, temperature, etc., etc. The bimanual examination is always used—one hand on the abdomen over the womb, while exploring with the finger of the other hand. In this way the size and mobility of the uterus can be determined, and in certain subjects it is pleasing to note what amount of information can be gained in this way. As an aid to the examination, the patient is encouraged to make the stomach soft and relaxed. If she become nervous and perverse, she can make the stomach as hard as a board, and effectually prevent a satisfactory examination.

As an instrument for acid applications, a wax bougie is used, having the advantage of being clean, little likely to break, and less liable to allow the acid to run than glass.

Rectal examinations, as an aid to thorough vaginal and uterine examination, are often made. Fibroids on the posterior wall of the uterus can be readily felt through the rectum.

Rectal irritations and diseases are common in those having the rectum pressed upon by a misplaced uterus. This is a hint that in some cases of disagreeable rectum symptoms we must not overlook the possibility of a uterine origin to the trouble.

The pubic and pudendal hairs are found to be a prolific source of disease among the poor, retaining secretions and filth. At every opportunity the patients are urged to wash themselves more freely, and to use as much care, and take as much pride, in being clean in and about the privates as they do with the teeth and hair of the head. In many cases it is advisable to snip off all extra hair about a chancre, or in those very

unclean and negligent. In my experience, both sexes are too negligent of cleanliness of the sexual organs. Men with long foreskins often fail to draw back the skin to wash away the sebaceous matter collecting about the glans while bathing, the result of which is a most sickening odor when it is discovered, and often causing irritation, eczema, and even a discharge, misleading one to believe it to be gonorrhœa. All ladies should wash the vulva daily; the vagina even in health should get its bi-weekly wash, and most certainly after menstruation. One medical man affirms that the lack of cleanliness is one grand cause of uterine disease. Small clots and films of blood may remain for days in the vagina after the menses, and, putrefying, act as irritable centres.

DISEASES OF CHILDREN.

Infantile Paralysis.

Dr. WILLIAM PEPPER, M. D., *Med. & Surg. Rep.*

GENTLEMEN: The first patient which I shall show you to-day is this child. The mother gives us the following history: She has had two children, one of whom died of cholera infantum. This little girl is nine months old. About the middle of July (five months ago), it was seized with general paralysis, and could move neither its hands nor feet. This was preceded for a few days by feverishness and restlessness. This condition of general paralysis lasted for two days. She then began to regain power in the right arm and left leg. Motion returned to the arm several days before it did to the leg. In the course of three or four weeks she began to use the left hand. Further than this there has been no improvement in the ability to move the limbs. She has had no spasm of any kind, nor has she had any injury suffi-

cient to suggest a traumatic origin of this paralysis. She had not been exposed to wet or dampness at any time.

This is an example of infantile paralysis, but it differs from ordinary cases of this disease, in the fact that the paralysis has been so general. As you are aware, infantile paralysis commonly comes on about this period of life; that is, during the first dentition, somewhere between the ages of twelve and thirty-six months. The causes of this affection are obscure. It sometimes undoubtedly comes from direct exposure and severe chilling of the body, but in many cases it comes on without any apparent adequate cause. It is usually preceded by just such symptoms as those described by the mother of this child. For a few days the child will evidently be unwell, feverish, restless, indisposed to be moved, crying and fretting, with a poor appetite, and perhaps with some little gastric disturbance, as is shown by vomiting. The child is, perhaps, put to bed in this condition without any evidence of paralysis, but in the morning it will be found to be paralyzed. The disease comes on then after an uncertain period of indefinite sickness, which is evidently sympathetic with the trouble in the spinal cord.

This case illustrates very distinctly another common feature of infantile paralysis, namely, that nearly always the loss of power is greatest at the beginning of the attack. The paralysis affects a larger number of members or muscles that remain permanently paralyzed, so that after a few days the paralysis begins to clear up, and those parts which have been least affected regain their power, leaving a certain number to be permanently paralyzed, or paralyzed for a longer period.

In this child neither the bladder nor

the rectum have been involved. This is the usual history. The deeper portions of the cord where the fibres going to the bladder and the rectum traverse, are not, as a rule, involved in the disease; for, as you know, the seat of the lesion in infantile paralysis is in the anterior horn of gray matter of the cord, and in the anterior column in this vicinity. The condition in the beginning is one of congestion, irritation and swelling. We can, therefore, readily understand that in these parts where the lesion is less severe, it may pass away leaving no organic change, and thus we may have cases of infantile paralysis which recover completely in the course of two or three weeks, more commonly owing to the extreme sensitiveness of the spinal system. At this early age we find that some part of the spinal cord is so badly hurt that it undergoes degeneration and atrophies, or at least tends to do so. In such cases the paralysis becomes permanent, and is followed by wasting of the affected muscles. Thus it is that this disease is often called atrophic infantile paralysis, because it is so frequently followed by wasting of the muscles which remain palsied; but this again depends upon the extent to which the antero-lateral column and anterior horn of the cord have been injured by the original cause. This may leave a more chronic trouble, which will pass away, leaving the integrity of the cord unimpaired; or it may be followed by wasting of the large multi-polar cells, which have a trophic influence upon the muscles, and this wasting is followed by atrophy of the corresponding group of muscles.

In treating the early stage of this disease, I think that it is well to act upon the supposition that there is irritation and congestion of the spinal cord. Counter-irritation along the spine and

the use of ergot, belladonna and iodide of potassium internally, are indicated. At a later stage of the disease, when as much of the paralysis as will clear away has passed off, and there remains only the permanent paralysis, which is associated with a serious lesion of the spinal cord, this line of treatment does not produce good results. We then have to depend upon remedies to promote the general nutrition, as iron and cod-liver oil, with correct hygiene, taking great care that the child is dressed properly and not exposed to dampness, draughts, etc. Friction of the skin should be employed to maintain the circulation, for the child cannot take that incessant exercise by which young children maintain a healthy condition of their muscles and functions. In addition to this there should be treatment especially directed to the paralyzed parts, hoping that the tone of the spinal centres will be sufficient to enable them to maintain their integrity and prevent disintegration and atrophy of the nerve cells, which will be followed by wasting of the corresponding muscles. I do not know that we have any remedy that specially influences the nutrition of these important nerve cells. Strychnia has no effect upon them, but acts only upon the motor nerves and the muscles. It is proper to use strychnia at a late period of the case, and it may be administered by the mouth or hypodermically, being injected into the affected muscles. The object of this treatment is to improve the nutrition of the muscle, and not to act upon the spinal cord. Massage, friction and passive movements should also be employed with the same object. The circulation of the skin should be stimulated by friction and warm clothing. Good results are often obtained by putting the affected member under an air pump and exhaust-

ing the air. The limb is, as it were, enclosed in a large cupping glass, a vacuum is created, and the blood is drawn into the part. This carefully repeated is frequently of service.

Electricity is an important agent in the treatment of this affection, but its use requires judgment and skill. That current is employed which will give contractions of the paralyzed muscles, and the interrupted galvanic current is practically the only one which is of service. It is to be used of such a strength and with the current interrupted at such a rate, and applied over the nerve points, the nerves themselves, or the muscles, according as you get the best results. There is no fixed rule to be laid down for the use of electricity, save that the current should be moderate and used in such a way as to secure contractions of the affected muscles. As many of you know, there is a special form of reaction of the muscles to electricity, which, however, I shall not consider to-day, which indicates the approach of disintegration of the cord. It is a reversal of the normal relation of the muscles to the interrupted galvanic current, and the detection of this is, although not absolutely of unfavorable prognosis, a serious sign.

What we do for these cases in private practice is to promote nutrition by the use of iron, cod-liver oil, later employ strychnia, keeping up friction of the skin, and training the parents in the use of massage and passive movements, carefully regulating all matters of hygiene, and if we have time and a suitable battery, apply the galvanic current in the way which I have suggested. These are cases which are more satisfactorily treated in institutions especially designed for this purpose, but the great objection to this treatment is its costliness, and we should have, in connection with

our general hospitals, suitable apparatus for the treatment of these cases.

These cases require a long treatment, and if this is neglected the paralyzed muscles may pass into a condition of hopeless atrophy from disuse, and although the trophic centres of the cord may not be ruined by the original disease, the muscles from lack of proper treatment become hopelessly wasted.

Attention has been called to the projection of this child's stomach. Occasionally the dorsal muscles, or abdominal muscles, are paralyzed, allowing the body to fall in all directions, or great protuberance of the stomach when the child sits up. This is one of the rare cases in which there is paralytic distension of the abdomen. I have seen this condition on a number of occasions, although it has recently been described by a specialist as though it were something quite new.

Benzoate of Soda in Summer Diarrhœa in Children.

Dr. H. B. FAY of Washington kindly sends us the following translation from *Abeille Méd. Par.*:

Dr. R. Guaita with others considers the summer diarrhœa of children a zymotic disease caused by the entrance of a special microbe into the body, and its development in the intestinal canal during digestion. A defective regimen, bad hygiene and excessive heat may be the predisposing causes. Starting with this idea, he bethought himself of the value of benzoate of soda, which had already been introduced into practice and extolled by Kapuscinsky and Zilewicz, in the vomiting and diarrhœa of infants, as an antizymic and alterative to the intestinal mucous membrane.

They used the benzoate of soda in combination with subnitrate of bismuth,

but Dr. G. used it alone, and without any other remedy, in fifty-three cases in infants from six months to two years. In thirty-five of these cases the affection dated from twenty-four to thirty hours; in eighteen others, from six to fourteen days.

In the first list the cure was accomplished always after four to eight days; in the second, on an average in twenty-one days, without a single death.

After a purgative (calomel, jalap), the doctor administers in twenty-four hours from four to six grammes of benzoate of soda in one hundred grammes of water, and that during two days. The third day, a lighter purge (magnesia, mannite), followed by a new administration of benzoate. After two days an amelioration of the stools is invariably observed, cessation of fetidness, and of vomiting. During the treatment the infant is dieted, only taking lemonade and some spoonfuls of rich wine. Milk and soup are entirely interdicted, the doctor having observed that milk, especially cows' milk, easily ferments in the stomach, and so aggravates the disease. Nevertheless, in the case of sucklings, it is necessary to allow the breast, but only four times in the twenty-four hours.

Other drugs, *pro re nata*, can be added to meet special indications. But the antizymic action of the benzoate of soda renders it, Dr. Guaita thinks, a very valuable medicament in the summer diarrhœa of children.

Dietetic Treatment of Nutritive Disorders in Children.

Dr. BIEDERT has treated a number of cases of infantile digestive disorders without drugs, by means of a strict regulation of the diet. The diseases thus treated were dyspepsia and dyspeptic diarrhœa, chronic catarrh, ex-

treme atrophy (tabes meseraica), ulcerative enteritis, cholera infantum, and one case of supposed epidemic dysentery. The children were most carefully watched, and the greatest care observed in carrying out the minute details of treatment. From the results obtained the author feels himself justified in recording the following deductions (*Centralblatt für Klinische Medizin*): A surprisingly large number of gastroenteric disorders in infants stand in such close relation with the quality and insufficient quantity of food, that the diseases, even in the most serious cases, may be cured solely by the administration of a suitable diet. 2. The quantity of food given is of the greatest moment. 3. The nourishment must often be given in greatly diluted form. 4. The proportion of albumen to fat plays an important role. The digestion of albumen is facilitated by mixing it with a much larger proportion of emulsionized fat than is found in cows' milk—that contained in human milk being the proper amount. 5. It should not be forgotten that at times there is a diminished absorption of fat, in which case it should be greatly reduced in amount, or, in order not to interfere with the digestion of albumen, slightly reduced to a proportion midway between that of human milk and cows' milk.—*Med. Record*.

Spectacles or Children.

In a paper read at the meeting of the South Carolina Medical Association (*The Medical News*) Prof. CHISHOLM answers the objections which have often been raised against allowing children to wear spectacles. Experience shows us, he observes, that the eye often varies much from the perfect type where vision can be comfortably enjoyed at any distance, the muscles of accommo-

dation adapting the lens so as to keep the focus always on the retina. What is called accommodation or ability to change the focus is a muscular act, which, by taking off pressure from the front of the lens, permits its inherent elasticity to give its surfaces greater convexity, and therefore greater focusing power. When these muscles are temporarily enfeebled by diseased conditions of the system at large, they do not lift off sufficiently the flattening pressure of the suspensory ligament, or they are too weak to keep up their continued action. Hence it is that sick persons, with weakened muscles, can not read so long, nor with the same comfort, as when well and strong. Magnifying spectacles for temporary use will thus enable persons to read while tonics are being administered. We often find children recently recovered from scarlet fever, measles, diphtheria, whooping-cough, or any of the depressing diseases of childhood, unable to study as they did before. In a little time the eyes seem as strong as ever, but a very few minutes will cause letters to run together, and the print becomes blurred. This is not a failure of the retina or of the nerve, but of the muscles acting on the lens. Weak magnifying spectacles, by helping the muscles to do their work, will enable weak children to continue their studies until their strength is restored. If children, either by inheritance or acquisition, have myopic or hypermetropic eyes, where can be the propriety of allowing them to go through life as if in a constant fog when properly selected glasses clear up the mist and enable them to see as others do?

OBSTETRICS.

When to Use the Forceps.

Dr. T. G. COMSTOCK, in the *St. Louis Clinical Review*, gives the following aphorisms :

(*Precaution* : If the forceps must be resorted to, it is better not to delay ; rather use them a little early in the labor than wait too long.)

1. In the second stage, as soon as labor flags ; pains severe, uterine contractions sufficiently powerful ; yet the head makes no descent or advance.

2. Presentation fair, head in the vagina, soft parts swollen, the perinæum rigid, and the pains, though severe and trying, cease to be actively progressive.

3. In posterior-occipital positions, where rectification of the position and normal rotation cannot be effected.

4. In cases of puerperal convulsions, dangerous hemorrhage, extreme exhaustion, rupture of the uterus when the head is within reach of the forceps, some cases of placenta prævia, after first trying the colpeurynter or tampon, uterine motor stimulants (*ergot*) and dilating the os.

5. In complicated labors, when the hand or arm descends with the head ; prolapsus of the cord ; other expedients having been tried in vain.

6. In breech presentations, to extract the after-coming head as soon as the body had been delivered. In such cases delays are always dangerous to the child.

7. In moderately contracted pelvis, when the head is so compressed as to require assistance.

8. In cases of pendulous abdomen, where we have a pendulous uterus, so that the expulsive pains are misdirected.

9. In face presentations, where the difficulty lies in the lower outlet, and

we fail to bring the chin forward, under the symphysis pubis ; even here the forceps are preferable to turning.

10. In cases of complete impaction of the foetal head, the forceps are always indicated.

11. When the mother has an organic disease of the heart, is subject to attacks of violent palpitation followed by syncope, is in the last stage of pulmonary phthisis, has a hernia liable to strangulation, or is asphyxiated.

12. In prolonged labor for want of uterine power, and in complete inertia of the womb.

13. When the labor pains are severe, but the natural powers of the mother do not expel the child two hours after the rupture of the membranes, and full dilation of the os.

14. Any other complications or emergencies that may suddenly set in during labor, causing a delay calculated to endanger the life of either mother or child.—*Mass. Eclectic Med. Jour*

[This is on the whole a fair resumé of the indications for forceps. It occurs to us, however, no code of rules for the use of forceps is complete which conveys no warning against the too hasty resort to them. Much harm is done with forceps owing to the prevailing tendency to underestimate the difficulty and danger of this operation. Grave mischief is frequently inflicted by the precipitate and careless use of this instrument where nature alone would have delivered safely. Again, oftentimes what would be a difficult instrumental delivery may be converted into an easy, natural labor by the early diagnosis and correction of a malposition or mal-posture of the head ; for example, an occipito posterior position or an imperfect flexion. It is important, therefore, before resorting to the forceps, to make sure that the delay does not

depend on some fault capable of correction. Referring to the Doctor's seventh aphorism, it is an important rule of practice not to apply the forceps in a pelvis slightly narrow in the conjugate only until the equator of the head has passed the brim. The head in such a pelvis naturally descends through the brim in a semi-extended posture, and with its long diameter nearly in transverse direction. The forceps above the brim greatly increases the resistance by inducing premature flexion and rotation. In such a case version above the brim is a much better procedure, since it does not disturb the natural mechanism while the head is passing the brim.

In case of pendulous abdomen, uncomplicated (aphorism eighth), the forceps are not indicated. The only thing needed is to correct the misdirection. Hold the upper segment of the uterus in its proper place manually or by means of a binder.

With reference to the thirteenth aphorism, it is a question whether this does not cause certain cases in which a hypodermic of morphia or a dose of chloral would effect relief by regulating the pains.] J.

Retained Placenta.

Dr. THEOPHILUS PARVIN, of Philadelphia, in the report of his service in the Philadelphia Hospital, recently read before the County Medical Society, has something to say on the subject of the treatment of placenta which will have a peculiar interest for those of our readers who have followed the discussion of the subject of the retained placenta, in the recent numbers of this journal. Dr. Parvin maintains that as long as the placenta is wholly attached hemorrhage is impossible, the placenta being, while such an attachment exists, a living structure and

within the uterus. By tearing it loose or rupturing its substance, the flood-gates are opened, which, unless closed by nature's styptic, a clot, let out the life of the woman. It is, therefore, the safest plan of procedure for the obstetrician to restrain from active interference in cases of attached placenta, unless existing hemorrhage calls for interference. A completely adherent placenta is not so dangerous as the intra-uterine use of the hand for its detachment. It will be seen that Dr. Parvin and "Old Practitioner," in the last number of the *Age*, agree very fully in this matter, and this is a subject in which it will probably pay to be conservative.—*Med. Age*.

[Prof. Parvin's reasoning, we assume, was not intended to apply to cases of partial attachment, which are more frequent than complete. In partial attachment the placenta is not a living structure, but in part a foreign body liable to putrefy. It is certainly good practice in any case to remove the placenta as soon as can be done without imposing greater risks than its continued retention entails. An eligible means to this end is the injection of the placenta through the umbilical vein.] J.

Method of Destroying the Fœtus in Cases of Extra Uterine Pregnancy.

Dr. KOCHMANN, of Strasburg, reports a case of extra-uterine pregnancy, six months advanced, in which the fœtus was destroyed by a single application of sparks from a static battery.—*Southern Clinic*.

Vomiting of Pregnancy.

The valerianate of cerium in ten centigramme doses three times a day, is recommended in the vomiting of pregnancy.—*Med. Med. Jour*.

DISEASES OF WOMEN.

The Lesser Degrees of Chronic Pelvic Inflammation in Women.

Dr. FRANK P. FOSTER, (*N. Y. Med. Journal.*)

We all know the frequency with which evidences of pleurisy are found in the bodies of persons who, during life, never suspected themselves to be the subjects of any thoracic trouble whatever. Perhaps it would be too strong a statement to say that like affections of the pelvic peritonæum, or of the cellular tissue between its folds, were equally common, or that they so often passed unrecognized. I think, however, that this much may be said: that they are by far the most frequent of all the diseases peculiar to women, occupying the position in gynæcology that the various forms of eczema hold in dermatology. At least, that is the conviction I have been forced to, without the opportunity of supplementing clinical study by post-mortem investigation. If those of you who have devoted much attention to the practical study of general pathology have been led to a different conclusion, I trust that you will state the fact, for it will serve to correct the error into which it will show me to have fallen. It will be understood, of course, that I refer to women who have not only reached adult life, but passed a considerable portion of the usual child-bearing period.

The periodical turgescence of the ovaries and the uterus inseparable from the menstrual function suggests itself at the outset, as, indeed, it has suggested itself from time immemorial, as an ætiological factor. The idea is obvious and plausible, and it cannot be denied that obviousness and plausibility often give the clew to facts. On the other hand, menstruation is a natural process, and,

while it is true that in many instances our organs perform their functions at the risk of injury to their integrity, if we allow a preponderating significance to the monthly pelvic congestion of menstruation, we must admit that that function is exceptionally prone to be followed by damage to the parts concerned—an admission which, to be of any great force, ought to be sustained by more exact data than those now at our command. Without specific facts, however, it would be quite as irrational to deny the morbid action of menstrual congestion as to cling to it to the exclusion of more precise ideas. But perhaps the present state of our knowledge warrants some such statement as this: that menstrual congestion is probably insufficient of itself to initiate a morbid process, although abundantly capable, by its repeated occurrence, of stimulating and developing diseased conditions which, but for some perturbation of the sort, would generally tend to disappear spontaneously. In other words, and limiting the statement to normal menstruation—to the element of congestion—the performance of that function is not a cause of disease, strictly speaking. Any marked deviation from the normal course of menstruation presupposes some antecedent disease, and, that granted, the question of the primary ætiological significance of menstruation is answered.

Abnormities of gestation and parturition, being in themselves pathological, we can more readily admit to be capable of giving rise to positive disease of the pelvic structures. To enter upon a discussion of their importance, however, would be to go over a field familiar to you all. I shall, therefore, content myself with suggesting one or two other possible sources of pelvic inflammatory disease that have come to my notice.

In a certain proportion of cases—not I must admit, a large proportion—a coincidence may be traced between the first manifestations of the disease and an attack of some intestinal trouble of an inflammatory nature. In quite a number of instances I have thought there was reason to associate an attack of dysentery with the production of the sort of disease under consideration. In still others, fewer in number, typhoid fever has seemed to play the same part. Doubtless the connection between intestinal affections and pelvic inflammation is no new notion, but it may be, nevertheless, that it is not borne in mind so much as the facts would seem to call for.

Not to take up your time with an enumeration of the various disorders ordinarily called “uterine,” which may be due to antecedent non-visceral inflammation. I will only call your attention to the capabilities of contracting layers and small masses of exudate in distorting the uterus, in binding it in abnormal attitudes and situations, and in preventing its expansion under the engorgement of menstruation; in producing stenosis of the Fallopian tubes; in crippling the ovary; in destroying the free expansion and contraction of the bladder; and interfering with the return of the venous blood from all these organs. This one element seems to me ample to account for the great majority of cases of dysmenorrhœa, sterility, ovarian pain, profuse menstruation, and leucorrhœa that make up so large a share of the every-day practice of gynecology.

It is not my purpose in this paper to enter upon the consideration of specific measures of treatment, but, if the foregoing views are of any value, they should not fail to exert a far-reaching influence upon the treatment of many of

the diseases of the sexual apparatus not generally suspected to be connected with extra-uterine inflammation and its products. Excluding the neoplasms that threaten life, I should say that, whatever abnormal conditions may be found affecting the organs in question, so long as chronic extra-uterine inflammation co-exists, it should be looked upon as the most important feature in the case, and as the one to which treatment ought chiefly to be directed. So far as my own experience goes, I have met with far more success by following this course than by seeking to remedy the more obvious derangements, whether versions, flexions, hæmorrhages, discharges, stenoses, or any of the other conditions that are usually the direct source of complaint. If I stood altogether alone in these views, I should hesitate to put them forward as of any importance, but I may be permitted to say that for several years past Dr. Emmet has virtually given up intra-uterine medication in the treatment of endometritis; operations designed to enlarge and straighten the uterine canal are falling into disuse; the flexion theory of dysmenorrhœa is drawing to its downfall; and it is beginning to be felt that the curette is not all-powerful.

But it is not alone the useless form which these considerations should warn us to desist; some of the therapeutic measures that have been much resorted to are injurious, especially when there is a tendency for the slumbering inflammation of the serous and cellular structures of the pelvis to break out into an acute affection. I will mention that only one of them which is probably considered by many the one least likely to cause trouble—the operation of replacing the uterus by means of an instrument. I doubt if there are many who will agree with me in the statement

that this procedure is unwarrantable under all circumstances, but that is my firm conviction. The leverage afforded by an instrument like the sound passed into the uterus, to a certain extent unguided and unrestrained by the sense of touch, is certainly capable of doing much damage. The danger would not be so great if the instrument were used only by those who appreciate the importance of extra-uterine inflammation, and are capable of recognizing its existence in the class of cases referred to, but there seems to be a mania for instrumental interference among those whose knowledge of the pathology and diagnosis of pelvis diseases is very limited. It is to be hoped that this state of things will pass away when gynæcology takes its place on the plane reached by other practical branches of medicine.

Late Marriages.

Dr. F. STEINMANN, of St. Petersburg, has recently published the result of his researches into the question of how far childbirth and lying-in are unfavorably affected by the primipara being old when she first becomes a mother. The estimate of the time when a primipara is called old varies between twenty-five (Fasbender) and thirty-five years (Mangiagalli), but Dr. Steinmann accepts that which most authorities have adopted, viz., thirty years. From twelve years' statistics of the St. Petersburg Maternity Hospital, during which time there were 28,279 deliveries, it appears that there were in that period 645 old primiparæ. Of this number a fraction over 69 per cent. were thirty to thirty-four, 26.2 per cent. thirty-five to thirty-nine, and 4.2 per cent. forty years and over; one of these was fifty-two years old. In 1875, when the general mortality was three and a half per cent., that of old primiparæ was nearly fourteen per cent.; and

again in 1881, when the general mortality was only one-half per cent., that of the old primiparæ was eight per cent. A decidedly greater fetal mortality when primiparity is late is also shown by the statistics collected by Dr. Steinmann, and, although the subject demands more attention from the profession than it has heretofore received, the facts adduced by him furnish strong reasons for objecting to late marriages. *Lancet*.

Pruritus at the Menopause.

The pruritus so often observed in women at the menopause, or change of life, is well known to be excessively rebellious to treatment, and the suffering caused by the affection, morally and physically, is often very serious. It is nothing uncommon to see women in the greatest prostration and despondency from the loss of sleep and appetite produced by an insupportable itching. The practitioner has often been disappointed at the little result obtained from the employment of remedies recommended by the greatest authorities, and both patient and attendant despair of success. Dr. Cheron highly recommends the following ointment where the pruritus is localized to axilla, the vulva or thighs or the abdomen. He declares that if this pomade is applied morning and evening the affection will yield to its influence: Veratrine, three grains; axunge, one ounce. When the pruritus is general over the body, he advises the veratrine to be given internally in pills: Veratrine, one third grain; liquorice powder, sufficient quantity for forty pills. Two to six a day.—*Medical Press*.

When do We Perform Oophorectomy?

Clinical Lecture by Dr. WM. GOOD-ELL (*Med. Times*): It is often em-

ployed in pernicious menstruation, which is a generic term covering a great deal. If there is a fibroid tumor of the womb producing an excessive menstrual flow which cannot be checked, we would call such a condition pernicious menstruation. Sometimes epilepsy occurs at the menstrual period, or just before the period; the woman will have hallucinations, or there may be ovarian insanity. These come under the same label of pernicious menstruation. At other times the woman is bedridden, suffering severe pain from the congestion and enlargement of the ovaries. This is another example of the same condition. By the removal of the ovaries relief from these symptoms is in the great majority of cases secured. The operation is still young, and I think has been abused, and is in danger of being abused. It requires the utmost caution on the part of the surgeon to decide whether or not to remove the ovaries. The extirpation of these organs does not unsex the woman in regard to her appearance, to her feelings or to her place in society; it simply prevents her from having children. There are several cases reported in which both ovaries have been removed by careful surgeons, and yet the woman has, months or years afterwards, given birth to a child. This has most likely been due to the presence of a third ovary, together with its Falopian tube. I have never met with such a case, but there are numerous instances in which a third ovary or ovarian structure has been found in the broad ligament, apart from the two ovaries.

Ruptured Perineum treated with One Stitch.

We notice in the July number of the *American Journal of Obstetrics* that Dr. H. J. LEE, of Cleveland, O., reports

three cases of lacerated perineum treated by a single suture, as recommended originally by Dr. Alloway of this city. He says the ease with which the operation is performed and the perfect results given by Dr. Alloway are sufficient reasons to warrant a further trial, and, if found to result as perfectly in other hands, it surely should succeed the more complicated operation which appears so formidable to both physician and patient. Dr. Lee does not agree entirely with the originator of the operation on one point. Thus, while Dr. Alloway thinks that the suture may be passed "at any point between the beginning and the end of the laceration," he contends that the suture should always be passed "on a level with the beginning of the laceration." He compliments Dr. Alloway highly on his conception of the operation, and wonders that, being so simple, it was not thought of before.—*St. Louis Med. & Surg. Journal*.

[It may be possible to hold the skin and mucous membrane together with one stitch long enough for them to unite, but that is not restoring the perineum. More than that is required to restore the anatomical structures of the perineum in cases of laceration. At least Dr. T. A. Emmet acknowledges that he has often failed to restore the sustaining power of the perineum with all the skill that he can command and the use of many stitches.

If such a surgeon gets such results by his method we may be pardoned for doubting the potentiality of one stitch.

A. J. C S.]

A Case in Gynæcological Practice.

Dr. H. B. RITTER (*Med. Herald*). Mrs. K., æt. 33, a mother of two children, presented the following symptoms: A sensation of fullness in the

pelvis, bearing down pains, painful distension of the veins of the thighs and legs, rapid beating of the heart, a throbbing in different parts of the body, headache, nausea and vomiting. There was also a blueness under the eyes which almost amounted to ecchymosis, and the sclerotics were injected. It was her menstrual period, but she saw nothing except on the second day of her sickness, when there was a discharge of blood from the rectum. Vaginal examination revealed only a congested uterus. These symptoms illustrate a general vascular tension. The tendency of vascular tension is to produce hemorrhage and thereby reveal itself. Had the menstrual flow come on the tension in this case would have been less and none of the symptoms would have troubled her.

The line of treatment was plain. The indications were to diminish the volume of blood, to moderate the tension of the blood vessels and to allay the excitement of the heart. Bleeding, no doubt, would have fulfilled all of these indications, but we preferred to use other means. A mixture of aconite and liq. ammon. acet. was given to allay the excitement of the heart and to lessen the tension of the blood vessels. To diminish the volume of blood, which of course moderate the tension of the vessels, she was given a dose of Epsom salts. The patient was kept quiet in bed and was ordered to take a Dover's powder at night. In a few days all the symptoms had disappeared and the woman went about her duties as usual. At the next menstrual period, however, the same symptoms, except the hemorrhage from the bowels, returned. She was put on the same treatment adopted at the previous month, and in the course of three days all symptoms again disappeared except the sensation of weight and full-

ness in the pelvis. There was now also a frequent desire to micturate. Vaginal examination showed that the uterus had enlarged, that it was lower in the pelvis and that it was anteverted. This abnormal position of the uterus accounted for the symptoms that remained. I suggested that she was pregnant, and such proved to be the case. The uterus was replaced and a 'Thomas' open cup anteversion pessary applied. Immediate and continued relief was the result. At the third would-be menstrual period the symptoms again returned, but in a very mild way. At the fourth period she had no trouble, and as the womb was now above the brim of the pelvis the pessary was removed. From this time the woman had no further trouble and went to the full term.

This case goes to prove the value of the mechanical treatment for the displacement of the uterus. Many practitioners are opposed to the use of pessaries, and when we refer to our early experience with those instruments we are compelled to believe that the opposition on their part is sincere. Nothing but practice will teach one how to select and fit a pessary. Like all other methods and means of treatment it is apt to do mischief when misapplied. But when a properly fitting pessary is applied for a displacement where there is no counter indication, such as acute inflammation of the uterus or surrounding parts, good results will follow. In the case just related the pregnancy was the cause of the displacement, and this in turn produced an irritation and congestion which might readily have brought about an abortion. Replacing the uterus and holding it there with the pessary at once relieved the irritation, proving that the pregnancy was not a counter indication to its use. No such results could, however, be expected from a non-fitting

instrument, as that kind of a pessary always produces irritation and would increase the tendency to miscarriage. Displacements of the impregnated uterus usually call for pessaries some time between the second and the end of the fourth month. Before the second month of the pregnancy the displacement, if it exists, gives rise to very little trouble as a general rule. After the end of the fourth month the uterus has risen above the brim of the pelvis out of the reach of the pessary and where displacements are no longer feared.

In retroversion of the gravid uterus the object of the pessary is to relieve such symptoms as are occasioned by the displacement; also to throw the fundus forward so that as it develops it will not be caught under the promontory of the sacrum and prevented from passing above the brim at the fourth month. In anteversion or flexion the only object is to give relief. As the uterus grows it always lifts itself out of the pelvis.

Menoxenia. A Girl of 17 Menstruates by Her Left Breast.

By Dr. RONXEAU (*Gaz. Med. de Nantes*).—During the winter of 1846-47, a girl consulted him for a singular and distressing anomaly. She was 17, middle-sized and well built, rather stout than slender, with ruddy cheeks, and other signs of excellent health. She had never lost a drop of blood through her natural ways, but since the last 4 or 5 months, she menstruated on the precise date, 3-4 days, through the left breast. The notes are wanting the determine, whether she ever had precursory symptoms of uterine activity; whether she saw any hæmorrhagic moulmen of the uterus, or fluor albus? She was within 8 days of her period, and she presented nothing abnormal in the region of the menoxenique escape.

Both mammæ were exactly alike in every respect. It was agreed that her mother should come with her in 10 days, when in the fullness of her flow, which she did. He found the left breast, which is rather more voluminous, tense and turgescient than the right breast, covered with blood-stained linen. After bathing and cleansing the breast with tepid water, blood was seen oozing out from the left nipple from 7 or 8 places, which gradually collected into a drop. Several observations were made and always with the same result. It was a complete menoxenia: congestion, tension, considerable sanguineous flow, hæmorrhage.

She was ordered to have 4 leeches applied to the anus 3 days prior to the expected period, fumigation with absinthe, warm peldiluvia, and internally some emmenagogues. The patient was lost sight of. This is a typical case of vicarious menstruation.—*Med. Gaz.*

Torture and Sexual Excitement.

The relation between certain auto-mutilations and sexual excitement was long ago remarked by Montaigne, who said that "lust seeks self-stimulation even in pain." It has been noticed that hebephreniacs often mutilate themselves, not from a sense of penance, but with obvious enjoyment. Dr. G. M. Cox (*Alienist and Neurologist*) cites an instance of the relation of these seemingly opposed agencies. The victim was a man—who had a wife and several children—of good character, and otherwise sound mentally, but who, at stated periods, displays certain peculiarities. He has never been known to cohabit with a lewd woman nor to speak an immodest word; yet he is a regular visitor and, in his way, a liberal customer of houses of ill repute. He goes early in the

afternoon, selects two of the largest girls in the house, repairs to a private room, and locks the door. He divests himself of all his clothing, except his trousers and boots. Then, lying on the floor, he commands his companions to walk over his naked chest, neck and face, taking care to stop and grind his flesh with their boot-heels. He then buys wine for his tormentors, but drinks none himself. This system of self-torture goes on for a couple of hours. It is said the ecchymosis thus produced soon disappears. The peculiar satisfaction experienced by the "flagellants" was evidently of an unrecognized sexual origin, and the subject needs investigation.—*Journ. of Nerv. and Ment. Dis.*

Clinical Gynæcological Observations.

Dr. C. C. VANDERBECK. In article No. 1, I closed with hygienic suggestions, as regards the cleanliness of the privates—in males as well as in females—urging daily ablutions, and particularly after menstruation. There seems, however, to be a possible danger in the usually harmless and hygienic syringe, particularly at an early period after confinement, before involution is completed. Dr. Thos. More Madden said before the Dublin Obstetrical Society, sometime in 1876: The vaginal syringe is the most frequently used instrument in gynæcological practice, being employed in nine-tenths of the cases of real or suspected uterine disease, freely ordered by medical men, and habitually used by patients, without any special caution or apprehension of possible danger. He then related a case in which the lady had used an astringent injection with the ordinary syringe. The injected fluid evidently had passed through the patulous os into the cavity of the womb, which was in a state of

subinvolution at the time, and a part of the fluid escaping through the dilated fallopian tubes into the peritoneal cavity. The symptoms were intense uterine colic, followed by severe metro-peritonitis, attended with almost complete collapse, and uncontrollable retching, placing the patient's life in extreme jeopardy for several days.

The numerous inquiries for a diagnosis, whether pregnant or not, surprised me. Dr. Price assures me that the cases of menstruation during early pregnancy are numerous. Many feel that they are pregnant—I mean by feeling, not the "quickening" and movements of the child, but the patient's own sensations—with the usual signs of nausea and enlargement of the breast, and yet are puzzled at the continuation of the "show." Whether this is a true function of menstruation is doubted. One would hesitate in believing that a function depending upon ovarian influence, performed by the lining membrane of the body of the uterus, would take place when the cavity of the uterus is lined by decidua—occupied by a "growth"—and the os closed by mucus. In examining authorities upon the subject, they all look at the matter with suspicion; all doubt it being true menstruation. The discharge at any rate resembles the menses in color, quantity and time. Such a state of affairs has been noticed and mentioned by Hippocrates, and other ancient as well as more modern doctors. It is sure that the fact is well settled at the Philadelphia Dispensary that very many pregnant women do have a periodical show of blood, varying from a few months up to nearly the full term.

An early symptom of pregnancy, not to my knowledge noticed in any work upon the subject, is the swelling of the feet—not in all cases, but in a sufficient-

ly large number of cases to make it a matter of value and interest.

In quite a fair percentage of cases the pulsation in the anterior lip of the uterus is an early symptom of pregnancy. More or less livid hue of the mucous membrane of the uterus and vagina is depended upon in making up a diagnosis of the present condition.

Cases just the opposite—no menstruation—coming for a diagnosis are more than numerous. In a great number of cases pregnancy is detected—in some it is really very difficult to come to a definite conclusion. Amenorrhœa has been diagnosed in cases where, upon first opinion, pregnancy might be suspected. Amenorrhœa not always presents the pallid countenance. Trousseau insists upon a florid variety of this disease. A young girl, aged eighteen, came to the clinic on account of absent menstruation. She was florid—quite the picture of health. Cross-examination and the closest physical examination failed to reveal *in the family way*. Future treatment substantiated the diagnosis of amenorrhœa. Iron is not always indicated in these cases. All good medicines are abused—iron with the others. I do not believe in specifics. The sooner we learn to treat individuals and not disease names the better. A useful chapter in therapeutics might be headed: *The Beware Side of Therapeutics*. Do we not fail too often in studying closely the contra-indications of medicines? We are taught what to give. Where is the chair to tell us what not to give! We doubt not that the title of “skillful” applied to many physicians has been earned by their bestowing upon this subject due attention—by being fully competent to wield their weapons to the utmost advantage, and with the greatest precision. We should try to avoid routine practice. Have a reason for

the faith and for the practice that is within us. Trousseau, as far as I know, is the best teacher of *beware therapeutics*. Now, in regard to this very subject of iron, he says:

1. When chlorotic women are disposed to diarrhœa, iron ought not to be given at first, and the soluble form should never be prescribed.

2. Iron is not entirely a harmless agent—death has been caused by the untimely use of it. Acute phthisis has quickly followed the cure of chlorosis.

3. Never give iron to chlorotic patients who have had suspicious symptoms of the chest, or have tuberculous parents. Never give it in the early stage of consumption; oftener in the latter.

4. In hysterical spasms, in a vigorous high-colored woman, who exhibits none of the signs of chlorosis, iron increases the convulsions.

5. Chlyrotic neuralgias are usually cured by iron, though less easily than simple chlorosis. In non-chlorotic neuralgias it generally fails.

6. Chlorotic gastralgia is cured by iron; but other varieties are made worse by the same remedy.

7. When pyrosis co-exists with gastralgia, iron is usually illy-borne.

8. Iron finds much wider application in the diseases of women than of men, probably because chlorosis, the chief triumph of iron, is usually an element, if not the sole constituent, in woman's anæmia.

It has been found that in the newly-married the breasts often enlarge and swell without the patient being pregnant—due to the fondling and toying incident to the approaches of the newly-made husband—frequent coitus having a tendency in the same direction.

A fact of interest and of importance is the number of young women apply-

ing for relief from pain in back, whites, etc., and who are found to be hot-beds of syphilitic affections—chancres, chancroids, warts, and mucous patches. Such a one declaring to her *pro tem.* lover her cleanliness, may not know that she is the centre of a terrible pest of society, and that her quarantine is as important to society as that of the cholera ship is to a city. What shall we do with the social evil? It is a great question for sanitarians and social scientists.

The usually received opinion of the colored race being particularly prone to fibroid tumors is here substantiated, one woman being seriously affected at the age of twenty-three. It may be proper to state here that the girls affected with mucous patches are taught the danger of contamination. Many of them think the only danger is from the primary sore, but it has been proven that they can furnish a catching pus, and syphilis can be communicated even in a kiss, when the patches are on the lips, gums or tongue. As a matter of hygiene all doctors in charge of clinical work should do their utmost to instruct the ignorant, caution the giddy, reprimand the vicious, and urge the utmost cleanliness on those who persist in this nefarious business.

Lacerations of the Cervix Uteri and Perinæum.

Clinical lecture by A. J. C. SKENE, M. D. (*New England Med. Monthly*).

GENTLEMEN: To-day I call your attention to the subject of laceration of the cervix uteri and perinæum, illustrating the same with such cases as have presented themselves at our clinic.

Our patient now before you is twenty-nine years of age, a native of Sweden; she is married and has one child, two years old. At its birth she sustained a peculiar laceration of the cervix to

which I call your attention. You are aware that as a rule laceration of the cervix is lateral, generally bi-lateral; but in the case before us, we have a laceration which is antero posterior, the anterior wall being but slightly lacerated, while the laceration posteriorly is quite extensive. This patient came to the hospital about six weeks ago, and at that time I operated upon her, the result of which was partial or almost complete union of the posterior wall, and union at the upper portion of the anterior wall of the cervix, leaving, as it were, a notch of about three-eighths of an inch deep. In the posterior wall of the cervix there is a small fistulous opening, the union not being completed at that point; we therefore cannot by any means call the results perfect in this case.

The reason that we secure so much better results in lateral lacerations of the cervix than in antero-posterior lacerations, I am unable to explain; I know full well that I performed the operation for the restoration of this cervix as well as any I have ever done, as I had at the time these very points in mind, and therefore omitted nothing which would tend to the success of the operation; but it seems that there is something peculiar about an antero-posterior laceration of the cervix uteri which interferes with the perfect union of the parts, but what that peculiarity is I am unable to state.

In this case the result has been fairly good, inasmuch as it has relieved the tendency to eversion which was observed previous to the operation; but still she is not feeling well. I remember when this patient was in the hospital she suffered considerably from pelvic pains, although she looked well; apparently she was one of those who to all external appearances are in perfect

health, and yet are always complaining, owing to some faulty condition of the organization. She is yet complaining, and it is possible that the uterus has not yet returned to its normal size.

Upon examination I find that the uterus measures about three and a quarter inches from the upper termination of the laceration to the fundus uteri; this is of the greatest importance for you to bear in mind, or you may be deceived in estimating the size of the uterus. It may seem to you not to be much enlarged for the simple reason that you take your measurement from what you supposed to be the os externum to the fundus, forgetting that you had omitted to allow for the extent of laceration sustained by the cervix. In this case the uterus measured three and a quarter inches from the point of its union with the vagina; it is therefore enlarged, involution never having been completed, although the injury was sustained three years ago. If you bear in mind this little point in regard to measurement you will avoid an error which is not infrequently made. If you bring the edges of the cervix together with two tenacula you can then take your measurement, and by this means avoid falling into error upon this point.

Laceration of Cervix and General Exhaustion.—Case 2. This patient is forty-six years of age, and is the mother of eleven children, the youngest being two years of age. She comes to us to-day suffering from severe leucorrhea. You have here, as you can all observe, a hyper-development of the lobæ minora. This is an excellent illustration and worthy of your notice, representing as they do two pendulous flaps of integument). Now this profuse leucorrhea comes from an eroded cervix. She has sustained a bi-lateral laceration of the cervix, which extends away above the

vaginal junction, so that it reaches almost up to the os externum. This woman has but very little strength, she is suffering from that exhaustion subsequent on frequent child bearing and prolonged nursing. There is a peculiar form of nervous exhaustion that comes from this that ought to have a special chapter devoted to it. These patients usually appear in fair health; they are often strong, vigorous women, with constitutions originally good, but they become so extremely exhausted that in some instances insanity follows as the result. In this case we have a profuse leucorrhea, which is largely kept up by the exposure of the mucous membrane of the cervical canal. It has been argued by some that it is abnormal to bear a large number of children, but I maintain just the opposite view, if the mother will give her time and attention to these children. It is not the bearing of children which brings about this exhausted condition, but the trying to do more or less of hard manual or mental labor at the same time, in addition to house hold duties, etc. Many women not only bear and nurse children, but at the same time do as much work as a man. This is the source of the exhaustion. In the upper class, or those who have nothing to do but attend to their children, we seldom meet with this peculiar condition of exhaustion, as in the wife of the mechanic, for the simple reason which I have stated.

We will direct this patient to rest from her labors, manual and procreative treatment including nerve tonics. We will also restore the cervix uteri and thereby relieve her from that source of exhaustion and irritation.

CASE III. This patient was confined here in the hospital and delivered of a monster by Dr. Stewart; I here show you casts of the result of her conception.

[Plaster casts exhibited to the class.] If you can imagine a difficulty, it must have been that in which Dr. Stewart was placed when endeavoring to diagnosticate the presenting part. As you observe, the head, arms, and legs and upper portion of the trunk are complete, the abdominal walls being absent, the liver, stomach and whole of the intestines are entirely devoid of any tegumentary covering, and were floating about in the cavity of the uterus. During the night or early morning a messenger called me to come to the hospital, and to be prepared to perform laparotomy. I hurried down, calling one or two assistants, and when I reached there I found that delivery was complete, and these casts which you see before you represent the result. Now we can hardly imagine a more difficult case to diagnosticate or deliver. Dr. Stewart however performed version and afterward affected the delivery.

Since the delivery the patient has complained of some uterine difficulty, and on examination I find that the cervix is pointing towards the pubes, the body of the uterus also is directed upwards and backwards, the uterus is changed in shape and out of position, so that we have here a deformity with a dislocation or ante-flexion and retroversion. There is also a slight laceration of the cervix; this however is not of any great importance. I am not at all surprised to find the uterus in this condition after having undergone so peculiar and difficult a labor. The treatment in this case will be to support the uterus from below, i. e., treat it as a retroversion, and the chances are that the cervix will drop down in its normal position. I have no doubt that the deformity will disappear with a little care, the organ being supported into its proper position.

Laceration of the Perinæum.

CASE IV. This case presents one of the most interesting condition which follow in complete laceration of the perinæum. We have here scar tissue stretching across and connecting the divided ends of the sphincter ani muscle which gives the patient partial control of her rectum. I wish you would get clearly in your minds what I mean by partial control of the bowels, which sometimes follows this complete laceration.

When the sphincter ani is completely divided, together with part of the septum, and no scar tissue intervening, there is then no control of the bowel, but when you have a mass of scar tissue extending down and connecting the sides or ends of the perinæal muscles as in this case, the sphincter ani contracts towards the excentric point, and by this means secures control of the bowel. There is then a fixed point of scar tissue towards which the sphincter ani contracts, and which results in the rectum being drawn forward, so that the distance from the posterior wall of the rectum to the meatus urinarius is much shortened by this contraction; and, at the same time, we secure a certain amount of controlling power over the rectum, which is a source of great comfort to the patient.

Now in regard to this case it is clear that we should restore that sphincter and perinæum. The question now arises as to the proper time to operate.

We should operate when the accident occurs, immediately, or else wait until involution of the pelvic organs is completed and the patient is in good condition. I myself am a firm believer in the immediate operation; that is, to bring the parts together immediately after the laceration has occurred, in the hopes of securing primary union. But in case that fails, or no effort has been

made to repair the laceration, it is always better to wait until involution of the vagina and uterus has become complete, because, if you operate before the tissues are in a good condition, your efforts may not succeed. It is also a well established fact that these lacerations are not readily repaired, if the mother be nursing her child, her nutritive forces at that time being directed in another channel. You will perhaps say that involution ought to be good at the end of three or four months. So it would be under ordinary circumstances, but in a case of this kind, where we have this extensive laceration, involution is retarded very markedly. I find this patient's uterus, even at this late day, has not yet undergone complete involution; the laceration having retarded the process.

I therefore believe that if we were to operate at once in this case, we should fail to secure union, for as I have said involution is not yet completed. The warm weather which we now have is also unfavorable. We will therefore do much better to allow her to go on as she now is until the autumn, in the meantime watching and treating her carefully for her general health. She should be constantly under care in order that the involution of the uterus may be completed by appropriate treatment.

DISEASES OF CHILDREN.

The Relation of Over-nutrition after the Acute Fevers of Childhood to Bone Disease.

Dr. JACOBI said he would refer to a class of cases which were not very uncommon and which were interesting because of their connection with a number of physiological and pathological

questions. A very simple and illustrative case was the following:

Some time ago a girl, eleven or twelve years of age, was present at his clinic for a swollen right humerus at its lower portion. The swelling was very slightly painful. There was a cicatrix about the middle of the arm, which had formed about six months before, after a sinus had lasted six years. A fistula opened an inch and a half above the elbow, on the anterior aspect, which led down to about the middle portion of the epiphysis, apparently extending to the periosteum only. It was stated that the humerus began to swell when the child was four years old, and very soon after she had gone through a severe attack of typhoid fever. The question arose, had this swelling of the bone and periosteum anything to do with the typhoid fever? Dr. Jacobi thought it had, for reasons which he would state. While he might not be able to say anything that was not known to every person present, still the case was of interest in connection with a number of others which he had seen, and which were very interesting to him, particularly so because they opened up the question of the cause of quite a large number of cases of a similar description. There was one peculiar fact in the development and growth of children, which was known to physicians and also to the laity, that children not only appeared very tall after having gone through a severe illness, and particularly through a severe infectious disease, but they were really taller than before the sickness, and they grew very rapidly for a short time during and after such infectious disease. The growth or tallness was not only apparent, from the patient having become thin, but by measurement it could be shown that they actually were taller.

The body became taller by an elongation of the bones; the bones grew by a rapid proliferation about the cartilage which separated epiphysis from the shaft. If the bone grew, it must be in consequence of a nutritive process, which might become an irritative process, in that neighborhood. And the question arose whether high fevers, and infectious fevers particularly, had not the effect of producing such irritative disorders as proved under certain circumstances a cause of increased nutrition. Observation showed that after all cases of infectious disease in particular the epiphyses and the adjoining cartilages were very hyperæmic. In such localities, if a post-mortem examination were made, the blood would be found to ooze out, and where there was much blood there was at least an opportunity for over-nutrition. In rhachitical bones we know that the intense growth and thickness were due to such over-nutrition. Thus it was that after most infectious fevers not only the epiphyses were apt to grow thicker, but also the diaphyses to grow longer, in consequence of the nutritive irritation of the cartilage (and periosteum). In cases in which the nutritive disorder, the hyperæmia, was not limited to its physiological condition, where it was a little more than physiological, it became pathological. In most cases the over-nutrition and growth ceased after a while and returned to the normal state, but in others they were carried to such an extent as to become pathological and cause necrosis. Such over-nutrition of the epiphyses was one of the forms of so-called "growing-pain." Growing-pains occurred very frequently after a severe illness, and especially after a severe attack of an infectious fever, and were due to hyperæmia which might amount to inflammation. The other forms of

"growing-pain" were either rheumatic or neuralgic in character.

The PRESIDENT understood Dr. Jacobi to mean that the necrosis occurred in these cases merely in consequence of over-nutrition, which became pathological, and in the absence of syphilis or inherited tendency. He would ask how the fact was to be explained that in rhachitical children this condition rarely occurred.

Dr. JACOBI replied that the character of the disease changed with the exciting cause. The syphilitic bone, for instance, differed from the scrofulous bone, and again from the rhachitical bone. The influence referred to as springing from infectious diseases and the rhachitic tendency were rarely combined in producing their effects upon the epiphyseal cartilages, for the infectious diseases usually occurred at the age when the rhachitic disease had already healed and the bones had become eburnated, preventing such elongation.

Remarks on Cholera Infantum.

Dr. JAMES CRAIG (*Archives of Pediatrics*) says:

During the summer months the mortality among children is alarming, and calls for the earnest attention of medical men. The extreme heat and enervating character of our climate tend to exhaust and induce a nervous condition of the system, and when attacking the digestive organs produce a specific diarrhœa, well named cholera infantum. Its course in some cases is very rapid, and in all dangerous, if not soon relieved. The watery evacuations produce a thickened condition of the blood, interfering with free circulation, causing passive congestion of the brain, and adding another danger, viz., compression from effusion of serum into the

ventricles, producing convulsions, and in some cases coma and death.

Convulsions, also, are caused by reflex action from irritation of the stomach and bowels. In some cases the stools are very frequent, with an odor *sui generis*, which is almost pathognomonic of the disease; in other cases, there may be very few movements, but very large in quantity, and when such is the case may there not be a septic influence at work poisoning the blood and overwhelming the system? Cleanliness should be rigidly observed, and the stools removed as soon as voided. Vomiting, or the effort to do so, is a very distressing symptom, and demands prompt attention.

The treatment of cholera infantum varies very much, and depends upon the physician's ideas and experience. The indications are to prevent nausea and vomiting, support the strength, and check the diarrhœa. In nursing, no change in the diet is made, but care should be taken not to nurse the child too often or too much at a time. If bottle-fed the milk is stopped, and stale bread, soaked in water with a little sugar and brandy added, or Robinson's prepared barley, or arrow-root made with water, and given in small quantities answers a good purpose. Milk is also prohibited where the child is weaned, but is gradually resumed as it improves; where the child is weak, one teaspoonful of brandy to six or seven of water, a teaspoonful of which is occasionally given. Where a more powerful stimulant is required, carbonate of ammonia in one or two grain doses mixed in syrup of acacia is used according to the age of the child.

For the gastric and intestinal derangement my favorite prescription is: \mathcal{R} Liq. acedi carbolici, 5 per cent, 3 j; bismuthi subcarb, pepsini sacch, aa, 3 j;

syr. aurantii cort, 3 ij; aq. cinnamomi, ad. \mathfrak{z} iij. M. Sig. A teaspoonful every two or three hours until relieved.

I also apply a spice plaster over the abdomen composed of the following: powdered cinnamon, cloves, nutmeg, ginger, allspice, of each, two drams; honey and glycerine, of each, four drams; white of one egg, and spread on cheese cloth or fine mosquito netting. It may remain on over the region of the stomach and bowels for hours or days without blistering; it merely reddens the skin, and is an excellent counter-irritant. A bandage should be applied over it to keep it in place.

Change of air frequently brings about convalescence in a very short time. When that cannot be had, the next best thing is to take the child out daily for an hour or two at a time early in the morning and late in the afternoon. While in the house the child should be kept in a well ventilated room, free from draughts.

Indigestion and Intestinal Catarrh in Infants.

In the discussion of Dr. BARTLEY'S paper on this subject, Dr. Walker said:

In regard to the classification of diarrhœas, a simple and quite accurate method seemed to him to be: 1. Simple or irritative diarrhœa, due to undigested food or other irritant. 2. Inflammatory diarrhœa. 3. What might be called nervous diarrhœa, due to weakened nerve-force and loss of muscular tone. All forms of diarrhœa were influenced by excessive heat and by changes in temperature, but it was not necessary that there should be decided changes in temperature to produce diarrhœa; "devitalized air" in dwellings, as Dr. Richardson, of London, called it, was sufficient.

In speaking of the treatment of diar-

rhœas, Dr. Bartley had spoken chiefly of the medicinal and dietetic, whereas he (Dr. Walker) placed the hygienic first. He had seen, for instance, in the city as well as at the sea-shore, severe forms of diarrhœa relieved by keeping the children out of doors in the air, but protected from the sun. He believed that better results would be obtained if physicians paid more attention than was generally paid to the details of hygienic treatment, instead of cursorily passing them over or leaving them almost entirely to nurses.

As to the feeding in diarrhœal troubles, from what he could learn from others and from his own experience, milk prepared in some way was the only reliable food, and all the patented baby-foods, and all the imitations of mother's milk, must give way to it; but what method of preparing milk could be adapted to all children had not yet been discovered, although he believed that observers were working in the right direction—i. e., 1, to keep the milk in as nearly as possible the condition it was in when taken from the cow, and, 2, to prevent fermentative and putrefactive changes in the alimentary canal; and here was where the antiseptic treatment of Dr. Bartley was of value.

After a correspondence with Dr. Corson, of Conshockton, Pa., the speaker had used, where he could, warm, undiluted cow's milk, even with babies suffering from diarrhœal troubles, and had been much pleased with the results. He had seen cases where milk prepared with barley-water, and in various ways, could not be digested, and yet whole undiluted milk was readily digested. The pancreatizing milk was a valuable step in the right direction. The importance of being explicit as to directions was seen, in certain instances, where the mother had been told to give

barley-water in place of milk, but was not told when to discontinue the use of the barley and to return to milk. The children were in a starving, marasmic condition.

He had been interested in ascertaining whether homœopathy was particularly "good for children with diarrhœas," and had had abundant opportunities for observing the effects of homœopathic remedies, but had failed to find that they were any more efficacious than, if so generally as, those of the "old school." After all, it was the difference in the practitioners rather than in medicines of the "schools" that gave different results.

As to the medicinal treatment, though he considered it of the least importance, yet it *was important*. The medicinal agents might be classified as follows: 1. Artificial digestives—pepsin, pancreatin, etc. 2. Medicines that removed or allayed irritation, viz., castor-oil, bismuth, etc. 3. Nervines or sedatives. 4. What may be called physiological antidotes—ipecac, corrosive sublimate, etc.

In his hands Dr. Goodell's colic mixture, with a small quantity of deodorized tincture of opium or fluid Dover's powder, had repeatedly served a good turn in quieting a fretful child, and so decreasing the number of discharges; but all children would not take it readily, any more than they would the bromides, luplin, etc., and he would like to hear from those present what had been useful in their hands.

Rectal injections of cold water he had also found, at times, would accomplish the same ends.

As a clinical fact, he called attention to the inability at times, in case of severe prostration, of inducing vomiting even by apomorphine, and to the result being attained by the subsequent hypo-

dermic injection of ether, ammonia, or some other stimulant.

Several years ago Dr. Hutchins, of this Society, had read a paper on "The Use of Salicylates in the Treatment of Gastro-intestinal Diseases." From this he had been led to use a mixture of salicylic acid, prepared chalk, mucilage of gum arabic, and spearmint-water in diarrhœas with excellent results. An objection to bismuth was the discoloration of the stools. As to astringents, the *Geranium maculatum* seemed better than kino and catechu. Dr. Bartley's suggestions as to boro-glyceride and other emollient and antiseptic remedies were excellent.

In conclusion, Dr. Walker asked the pardon of the Society for the rambling character of his remarks, which the want of time for preparation had rendered necessary. What he had said gave his individual opinions, and should be so considered. What was needed was the systematic and combined work, on some definite plan, of a number of gentlemen. Then individual opinions by classification and comparison would be of value. For this end he would be willing to work at the Sea-side Home and in the city in conjunction with other workers.

Dr. Read, referring to Dr. Bartley's remarks upon starchy food, had understood the doctor to say that "under one year of age starchy food should never be given to infants." He would dissent most strongly from this opinion. The truth was that much error existed in the wholesale denunciation of starchy foods, which was so often seen, and this variety of food was held accountable for much damage with which it had nothing to do, or rather with which it would have had nothing to do had the food been given of a proper kind and quantity. There were many varieties of

starch, and there was as much difference in regard to the digestibility of these various starches as there was about the digestibility of the different kinds of meat. Potato-starch was the most difficult, and barley-starch the easiest of digestion, and between these two lay a large number of greater or less ease of digestion. Starch in its various forms, comprised the largest portion of infant food, and to say, therefore, that this kind of food should not be given, was to deprive ourselves of the bulk of foods suitable for the infant. Under the age of two or three months, it was true, children had not the full digestive powers for starchy foods, but that they did digest them even at this age, was a clinical fact familiar to any one who had seen a child brought up from birth on barley, granam, oat-meal, crackers, etc. The digestive powers of the child in respect to starchy foods increased rapidly, till, at ten or eleven months of age, it equaled, at least in diastatic effect, that of the adult. The clinical fact was, that children were fed on starch; that to milk we were constantly obliged to add starch of some kind. The real point in this troublesome problem of the proper feeding of infants was, not the banishing of starch altogether, but its proper selection, proper preparation, and proper administration.—*N. Y. Med. Jour.*

Carminative.

A carminative in infantile colic. R Tinct. assafoetidæ, gtts. xv; tinct. cinnamomi, ʒ ss; sodæ carbonas, ʒ j; syr. rhei aromatic, ʒ iij; aqua, ʒ iss. M. Sig. Half teaspoonful every three hours.

DISEASES OF WOMEN.

Vaginal Cystotomy in a Case of Paralysis of the Bladder, with Remarks on Catheterization of the Uterus.

Dr. WILLIAM M. POLK, *N. Y. Med. Jour.*: This case, gentlemen, is that of a woman, about twenty-eight years old, who a year ago fell from a third story window, sustaining injuries to the spine which resulted in paraplegia. She was admitted to the hospital two months ago. As is usual in such cases, there was paralysis of the bladder and rectum. An additional feature of interest is the fact that menstruation was also suspended. The paralysis of the limbs has now been cured four months, and the rectum, though performing its functions somewhat sluggishly, has greatly improved. The paralysis of the bladder and the suppression of menstruation continue.

First, as to the bladder. There is a constant dribbling of urine, with all the annoyances arising from it, such as the discomfort of the wet state, the excoriation resulting from the action of the urine, and the ever-present offensive odor. In addition, there is constant pain in the region of the base of the bladder. The urine is loaded with pus and mucus, contains myriads of vibrios, and is highly alkaline.

Passing the finger into the vagina, we find the uterus and ovaries normal, but between the anterior vaginal wall and the symphysis there is a rounded, sensitive tumor, in size about equal to an egg. Passing the catheter through the urethra, we find this tumor to be the bladder, and, as you see from the absence of any flow of urine, the empty bladder.

With the instrument in the organ and my finger in the vagina, I can carefully

explore its base and sides, and, by placing the hand thus above the pubes, I submit its upper parts to the same process. By this means I prove that there is no tumor or foreign body in the bladder, and that the mass between the anterior vaginal wall and the symphysis is nothing more than the organ itself, made prominent by its greatly thickened walls. Extensive hypertrophy of the walls of the bladder has been the result of the spinal injury.

Let me say here that, in making a vaginal examination, if a normal bladder is empty, you will find no prominence between the anterior vaginal wall and the symphysis pubis; the two surfaces can be brought into close relation, and the wall moved freely in all directions over the face of the bone.

Going back a little, we know from analogy that what has taken place in the bladder and its connections is the following:

The injury inflicted upon the cord by the fall expended itself mainly upon the lumbar enlargement, arresting for a time not only all action originating there, but all that might have been sent from the upper portions of the cord and the brain. Gradually this lesion has been repaired for all the centers save those presiding over the bladder reflex and the function of menstruation. Paralysis of the bladder was not accompanied by paralysis of the urethra, for, as you see, this canal is tightly closed. Soon after the injury there was prolonged retention of urine, requiring the use of the catheter; after the patient left the hospital this gave place to dribbling of urine, for, as she had no means of relieving herself, the urine accumulated, distending the bladder, and finally forcing itself by mere weight through the resisting urethra.

As you may imagine, the vesical walls

began to suffer from this constant distension; but, granting that they might not resent it, they surely would find it difficult to submit to the irritant action of the now decomposed urine. As a matter of fact, the combined influence of the over-distension and the irritation is shown in the hypertrophic thickening of the muscular and mucous walls of the bladder. Not only have the walls been thickened, but the capacity of the organ is much diminished. Whereas at first a quart of urine or more would be retained before dribbling set in, now four ounces represent its capacity. Does the mischief stop in the bladder? We know to the contrary; the resistance of the urethra extends beyond the bladder. It is sufficient to cause the amount of hypertrophy and thickening witnessed here; it is sufficient to dam back urine through the ureters to the pelves of the kidneys, and set up double pyelitis with all its attendant dangers. The histories of these cases prove that such is the termination of this condition of the bladder, and, though our patient does not as yet give active evidence of implication of the pelves of the kidneys, that occurrence is a mere question of time.

Naturally we ask ourselves if this evil cannot be averted. If this patient were under constant supervision, so that the urine could be drawn every two hours and the bladder washed out twice a day and fully distended, a great deal could be accomplished; but even this would not meet the difficulty so well as another procedure—viz., *opening the base of the bladder*. Make such an opening, and you relieve the bladder from its embarrassment. The urine flows off as fast as it is received from the ureters; the bladder, relieved of pressure and the decomposed urine, will grow no worse, but improve. And more than all—the pressure being taken from the

ureters and pelves of the kidneys, the urine flowing off through the ureters as fast as it is formed, and decomposition and its results to the pelves being avoided—not only are the pressing dangers relieved, but we put the patient in the best position to escape those that lie directly in her way.

The cure that has taken place in the lower extremities—for the patient has entire restoration of their motor and sensory functions—and the great improvement she recognizes as having occurred in the rectum justify us in believing that in time improvement may occur in the action of the bladder; but, if she were to be left as heretofore, there is reason to believe that long before such improvement came, the state of the kidneys would make it serve a short career of usefulness. The same general treatment employed since her admission will be continued—tonics, galvanism, and faradization from the region of the bladder to the lower part of the cord, coupled with the occasional use of the actual cautery over the lower dorsal and upper lumbar regions.

While the patient is being anesthetized I will occupy you with some suggestions touching the second morbid condition—the suppressed menstrual function. Until the injury, this function had never suffered arrest; from that time till now it has been suspended. What is the cause? Unquestionably, the injury to the spine, and the injury must have been low down, so as to sever the connection between the lumbar enlargement and the internal genitals, for we know that even after division of the cord in the dorsal region, *above the lumbar enlargement*, the processes of evolution, of development of the pregnant uterus and the lacteal glands, and of parturition, may go on. If we may be allowed a conjecture, we

will say that the lesion which has affected the centers presiding over the action of the bladder has likewise interfered with those presiding over the function of menstruation, and perhaps ovulation. It would be a most interesting study, that of the condition of this woman's ovaries. Is the development of the ova interfered with? Could we determine it in conjunction with a careful study of the cord, much light might be thrown upon the vexed question as to the independence of ovulation and menstruation. The two processes are so intimately associated, however, that it is probable any lesion of the cord affecting one, would most likely affect both. But, whether ovulation is involved or not, menstruation assuredly is, for never since the injury has she given symptom or sign of such an occurrence. And just here let me again call your attention to the fact that we have no other cause of this cessation present. Supposing ovulation to continue, the question of pregnancy in this case must still be answered in the negative, for, in the absence of every evidence of uterine activity, even at the periods at which menstruation would fall due, we must conclude that here, at all events, the trophic changes in the uterus are so seriously impaired as to make the formation of a decided membrane impossible. Without such a membrane the implantation and development of an ovum are highly improbable.

But the patient is now ready for the operation, so, with your permission, we will cease commenting upon these interesting but obscure topics, and turn our attention to a matter of more immediate and practical importance to her and us. The point at which to make the opening is in the median line, half an inch above the vesical end of the urethra. We must bear in mind the re-

lation of the ureters to this line, else injury may be done their openings. The injury itself would hardly cause much inconvenience, but subsequent contraction at the seat of injury might end in constriction or even closure of the tube—a matter of great moment. These openings are situated from half to three quarters of an inch from the anterior median line of the vagina, one on either side, and are about an inch and a half from the vesical end of the urethra. Our opening will, then, be so placed as to avoid injuring not only the ureters but the vesical end of the urethra as well—a matter of less importance than lesion of the kidney outlets, but one bearing strongly upon the action of the urethra as an outlet—a question that may come up should the paralysis of the bladder be cured. The position of our patient is that upon the back with the thighs well flexed on the abdomen.

This blunt wire curette, having a large loop, will admirably serve our purpose as a guide. Introducing it into the bladder, I place the loop at the point selected for incision and press the vesical and vaginal walls down and out on a line with the ostium vaginae. You can easily feel the loop as I thrust this knife through the walls directly into it. Taking next this probe-pointed bistoury, I enlarge the opening toward the uterus so as easily to admit my index-finger.

Owing to the condition of the walls, the bleeding is somewhat more than is usual with these cases, but even here it requires no special effort at arrest.

Carrying my finger well over the vesical wall, I appreciate the condition of the diseased mucous membrane. As intimated in the earlier remarks, it is thick, and thrown into folds; and off to the patient's right is a distinct pocket

in the wall, free, however, of anything like stone formation.

As it is a matter of some importance to determine the condition of the pelves of the kidneys, and as the urine in the bladder is so infected with the products of vesical inflammation as to furnish us with no satisfactory evidence upon this point, I will collect some directly from the ureters by catheterizing them, and, at our next meeting, will give you the result of the inquiry.

We next wash out the interior of the bladder with a warm, saturated solution of borax, introduce this glass button, having a hole through it, into the opening, and return the patient to the ward. Should we leave the opening without the button, it would speedily close. To insure a permanent opening and give free drainage to the bladder, we must keep this perforated button in place for several weeks—perhaps as long as the paralysis lasts.

Our confident expectation is that this patient will improve greatly. Certainly she will be relieved from the drain and tension incident to a chronic cystitis, and possibly pyelitis, to say nothing of the relief given the kidneys by the free escape of the fresh urine.

We will keep the vagina clean, and for the present distend the bladder once a day with a warm solution of bi-chloride of mercury, 1 to 2,000, and chloride of sodium.

Before closing, permit me, gentlemen, to say a few words upon catheterization of the ureter. You have seen me do it upon this patient, after making the opening into the bladder, using a No. 5 instrument. Can it be done without such an opening? Yes. Simon did it by forcing the finger through the urethra, passing the catheter alongside, and guiding its point with the fingertip into the canal. The great objection

to this procedure is that it usually results in permanent incontinence of urine—a very serious mishap.

Pawlick maintains that it can be done by following with the point of the catheter—the instrument being introduced through the urethra—certain lines on the anterior vaginal wall which indicate the course of the ureters as they enter the bladder. He states that these lines can be made evident in all cases by carrying out the following directions:

The bladder must be empty, the abdomen free, the woman to be put in the knee-chest posture, and the perinæum raised so as to distend the vagina with air. The lines are then seen starting from about the points at which we know the ureteric orifices to be situated, and running upward and outward, the course of each corresponding to that of the ureter.

There is no doubt that in cases of relaxed and distended vaginæ these lines can be brought out, but in such as present contrary conditions you will as often fail to find them.

But, granting that they may be recognized in all cases, the great defect in the method is the difficulty attending the determination of the question as to the actual entrance into the ureter. The depth to which you may carry the instrument is but a poor guide. Many bladders are so elastic as to be carried before it, even so far as the synchronoses. Given a case in which catheterization of the ureter is demanded as a means of diagnosis—and every renal tumor requiring extirpation is such a case—Pawlick's method is too uncertain. Should the patient be a woman, open the base of the bladder, pass your catheter through the urethra, and, by means of your finger passed through the artificial opening, you can always insert the instrument into the canals.

You collect urine first from one kidney, then from the other, and are in the only sure position to determine the state of the two organs. Should both be diseased, you spare your patient a fatal operation. Should one be sound, by operating you prolong life.

[This lecture by Dr. Polk is one of great interest, chiefly because it deals with a subject which deserves more attention than has yet been given to it.

The lecture itself gives good evidence of that which we believe to be true, that the general knowledge of the profession regarding diseases of the female bladder is rather crude and limited. It is exceedingly difficult to see any reason for performing vaginal cystotomy in the case related in this lecture. We cannot see what benefit the patient could derive from it. The bladder was empty and contracted, showing that then urine flowed away as fast as it came from the kidneys. Drainage of the bladder was as perfect as it could be made. It always is in cases in which the bladder is contracted and the retaining power lost and cannot be made more so by a vesico-vaginal opening. Perhaps the object of the operation was to enable the professor to show his class of students how to catheterize the ureters. If so, that is easily understood. But if the operation was made to cure the cystitis or make the patient more comfortable, then it was heroic, but not appropriate, in our opinion. Drainage is all that can be obtained by cystotomy, and in the case in question the drainage was about as complete before the operation as it could be after cystotomy.

The chief interest in the case related in the lecture is its showing that drainage will not cure all cases of cystitis (as some suppose), whether it be made

through a vesico-vaginal opening or through the urethra. This fact we have often expressed, but it does not appear to be very generally accepted and known.]

A. J. C. S.

Hydrastis Canadensis in Gynæcological Practice.

Dr. EDGAR KURZ, of Florence, contributes a short article to Betz's "Memorabilien," in which he summarizes Scharztz's statements in regard to the effects of the drug, and briefly recounts his own experience with it, having employed the fluid extract. The first case was one of profuse menstruation in a girl fifteen years old, in whom menstruation had been established six months before. Twenty drops were given three times a day, beginning fourteen days before the period. The first flow was perceptibly moderated, and the continued use of the remedy for a few months rendered the performance of the function perfectly normal. The second case was one of slight metritis and oophoritis. The flow always occurred several days too soon, and lasted fifteen days, so that the patient was very much weakened. The use of hydrastis was followed by a restoration of the flow to the proper character, but the other features of the case were unaffected. The third case was one of a large interstitial fibrous tumor with hæmorrhages at irregular intervals. After several weeks' daily use of hydrastis the flow returned only once in three weeks, and, after a few months' continuance of the remedy, only every four weeks, and the quantity of blood lost became normal. No diminution in the size of the tumor was observed. The fourth case was one of defective involution of the uterus after an abortion, with a profuse flow every three weeks. The use of hydrastis was begun eight days after the sub-

sidence of a flow, and the next menstruation occurred at the proper time, and the loss of blood was diminished. The medication having been discontinued, the next flow came in three weeks, but a resumption of the use of the hydrastis caused the patient to become regular again. The fifth case was one of chronic oophoritis, with moderate losses of blood occurring quite irregularly—every eight or fourteen days. The use of hydrastis caused the flow to appear regularly every three weeks. The sixth case was one of prolapse and retroflexion of the uterus, the organ being soft and easily brought into a state of ante flexion. Menstruation was profuse and anticipating, and the patient had hystero-epilepsy. The use of fifteen drops of the fluid extract of hydrastis three times a day was begun fourteen days before an expected period. The flow soon became regular and less profuse, but each menstruation was still accompanied by a hystero-epileptic attack until a Hodge's pessary was inserted. The seventh case was one of chronic metritis and endometritis, with profuse menstruation lasting ten days. A prolonged use of hydrastis reduced the duration of the flow to four days, and at the same time the leucorrhœa was decidedly diminished.—*N. Y. Med. Journal.*

[One who was not in the habit of doing his own thinking might suppose from the above article on hydrastis that it would answer all requirements of the gynæcologist. A kind of cure-all is this remedy, if we accept the statements given regarding it. There is not in all that is said the slightest reason for believing that it has any influence whatever in the menstrual function.]

A. J. C. S.

Emmenagogue.

Dr. M. M. GRIFFITH (*Med. World*): The pill used by the French women to produce barrenness I have found a valuable emmenagogue. Each pill contains two grains each of aloes and carbonate of titanium. They have never failed to bring on the menstrual discharge at the next epoch. Stoppage produced by cold, etc., is restored by this preparation in forty-eight hours. It is a most powerful direct stimulant to the sexual organs. I have no doubt that it would produce barrenness if persevered in. A married woman using the pills does not become pregnant. My usual formula is as follows: \mathcal{R} Pulv. aloes (soc.); Carb. titan., āā, 3j. Fiant pilulæ No. xxx. Sig.—One pill three times daily. No particular nicety need be paid in regard to dose; from one to three pills may be taken *ter die*. They should be commenced from one week to ten days before the expected menstrual period. I have employed them in many cases of amenorrhœa, both in retention and suppression, and almost invariably with the utmost gratifying results; so certain are they to restore the uterine secretion, when suppression does not depend upon organic disease, that I almost regard them as a specific. Their action is peculiar; they seem to possess the power of restoring the secretion when suppressed, and of promoting it when deficient. This pill is, in fact, a "female regulator." When the obstruction is from cold, these pills, with warm pediluvia, are sufficient. They operate kindly and without excitement; the patient hardly knows she is restored.

[If these pills are as represented in this article by Dr. Griffith, they are likely to become popular, to the danger rather than the benefit of the human race. "A married woman using these pills

does not become pregnant," so the Dr. says. How is it with the unmarried who use them?] A. J. C. S.

Pruritus Vaginæ.

Dr. HACH stated at the Riga Medical Society (*St. Petersburg Medicinische Wochenschrift*, March 22), that, in a very obstinate case, in which various external and internal means had been employed in vain, he had met with complete success from dusting the mucous membrane of the vagina with iodoform. Beyond slight redness of the vagina, no diseased appearances were observable. Dr. Rulle stated that he had often employed iodoform balls in this affection, but had derived better results from the watery extract of opium, and small injections of cold water. He believed that this pruritus often arose from a slight dilatation of the rectum, just above the sphincter ani, which gave rise to detention of fæces there.—*Med. and Surg. Reporter*.

Papillomatous Multilocular Cysts of Both Ovaries.

Dr. LISTEN H. MONTGOMERY sends us the interesting history of this case, reported to the Chicago Medical Society recently by Dr. C. T. Parkes:

The cysts had ruptured and discharged their contents into the peritoneal sac. The history of enlargement embraces a period of only six months. The patient stated she never had an illness previous to the commencement of the abdominal enlargement. She emaciated to great extent and rapidly. The patient measured 44 inches in circumference at height of umbilicus.

The greatest difficulty in the case was the differentiation between ascites and ovarian cyst. There was no œdema,

nor had there been any of the lower extremities. Percussion gave dullness in all directions, lying, standing, or sitting, the only source of resonance being in the epigastrium. Fluctuation was very distinct on the slightest touch in all directions. Pelvic examination ascertained that fluctuation was not to be felt in the pelvis. Here also was determined the presence of a small growth about the size of the closed fist on right side. Uterus displaced forwards, close to (or *behind*) the pubes. Cul de sac of Douglas filled with foreign body.

Diagnosis.—Ovarian tumor. Ruptured sack and contents emptying into peritoneal sack. *Operation*.—Forty-four pints of fluid were evacuated from the abdomen and tumors; fluid of dark amber color. No large amount of lymph precipitated in it after standing. Both ovaries were found diseased, there being present on the left side a ruptured papillomatous tumor. It still contained some fluid, which could be pressed out at the site of papillary growth. The right one had not ruptured, but was bound down deeply in the pelvis by adhesions. The true pelvis was filled by these tumors and their adhesions. After much trouble the tumors were enucleated and removed, *and were shown* to the Society. The operation was done June 14th. Up to June 18th the temperature had not reached 100° F., the patient being strong and cheerful. Bleeding was quite free immediately after the separation of adhesions, but under pressure with dry sponges soon ceased. A drainage tube was left in the lower end of the incision down to the bottom of the pelvis.

Anticipating free discharge from such an extensive raw surface, the drain was very free through it for two days.

June 20.—Her temperature has been normal for the past two days.

June 27.—No unfavorable symptom has thus far interfered, and she is progressing to an auspicious convalescence.

DISEASES OF CHILDREN.

Wortmann on Tubercular Meningitis.

Dr. WORTMANN contributes (*Jahrbuch f. Kinderh.*, b. xx, h. 3) a long and valuable analysis of fifty-six consecutive cases of this disease. Thirty of the patients were girls and their ages were from eleven months to ten years, about three-fourths of the entire number being between two and five years old. All but six were badly nourished on admission, and twenty-five had enlarged glands. A family taint could be traced in twelve. The first symptom of the disease proper seemed to be vomiting, which usually took place three times a day or oftener, but very seldom at night. It nearly always ceased when the pulse became slow, though in one case it continued throughout and could not be subdued. Contrary to the experience of many, in five cases the vomiting returned after a cessation of from two to four days. In four patients vomiting was absent. Constipation was present throughout in forty-two of the patients; in ten it gave place two or three days before death to involuntary motions, and in the remaining four diarrhea persisted throughout the complaint. Headache with one exception was a constant symptom. The abdomen was markedly retracted in thirty-four, and moderately in the rest, but the author's experience did not support Vogel's view, for in only three was there any tonic spasm of the abdominal muscles. Irregular respiration was never absent, but as the end approached it usually gave place to severe dyspnea. The pulse followed the

recognized course, becoming rapid a few hours before death in every case. Fever was present even in the prodromal stage. In the first stage proper, it was never over 104° , and showed morning remissions of nearly two degrees. When the pulse became slow the temperature began to fall, but was some days before it reached the normal point. In 16, however, it rose instead of fell, and six of these were without complication. In the third stage the temperature varied much in different cases, but as a rule it either rose or remained the same. Occasionally it fell, and in two cases it sank to 89.6 . Shortly before death it suddenly rose in uncomplicated cases to a great height, as from 99° to 106 . After death the temperature rose moderately where it was previously high for some time, but where the rise had been sudden, it rose a great deal; in other cases it gradually sank after death. Retraction of the head was present in all but one case, and commenced when the pulse became irregular; in one the head was drawn to the left as well as backward, and here a large tubercle was afterwards found on the left side of the cerebellum. Hyperesthesia was present in all but one of those cases in which the spinal meninges were involved. Herpes zoster appeared in one of these cases. The urine was carefully examined, but showed no constant alteration. the urea was sometimes increased, sometimes diminished. A frequent symptom was photophobia. The pupils in the first stage were chiefly remarkable for their sudden changes without any corresponding changes in the amount of light. When the pulse became slow and irregular, the pupils dilated and were sluggish. A transient difference in the size of the two pupils was frequently noticed, but appeared to have no relation to the position of the child. On

the pulse becoming rapid again, the reaction to light was generally lost, and the pupils were either of normal size or contracted. The ophthalmoscope was used in twenty-seven cases. Of these twelve presented a normal fundus, four showed tubercles of the choroid, ten venous hyperemia of the retina, and amongst these were four with optic neuritis. One case showed hemorrhages and cloudy papillæ, in which the autopsy disclosed large tubercles in the cerebellum, but no nephritis. Nystagmus was observed six times, ptosis five times. General convulsions set in with commencing coma. Partial convulsions which affected chiefly the face, appeared earlier; the pupils became dilated during the paroxysms. Paralysis, which was never complete, affected in different cases the eyes, face and extremities. In the last it was preceded by tonic spasm of the part affected. The *tache cerebrale* was in a varying degree present in the majority, but flushes of the face alternating with pallor were remarked in all. The skin was dry until near the end, when sweating broke out. The duration of the disease was from six to forty-five days, with an average of eighteen.

The necropsies showed general milary tuberculosis in forty-five out of the fifty-six cases. Cheesy deposits, chiefly in the cervical and bronchial glands, were found in all. The spleen was tubercular either in the substance or on the capsule in every case. In twenty-eight it was enlarged. The mesenteric glands were always enlarged, and, in fifteen cases they were cheesy. The exudation at the base of the brain was of a more or less gelatino-purulent character, frequently extending forwards so as to involve the olfactory lobes. The convexity was involved in fourteen cases, but in no case was the

convexity alone affected. The ventricles were dilated, the choroid plexus showed tubercles in nineteen cases, and contained a moderate amount of blood in all. The spinal cord was examined in the last twenty-seven cases. In four of these no change was found; in the remainder the spinal fluid was increased, and often turbid. The pia mater, especially in its posterior aspect, was thickened, yellowish, and tuberculous in direct proportion to the duration of the disease. In four the dura mater was thickened, and in two cases the spinal cord was the seat of a large solitary tubercle.—*Lon. Med. Record.*

Constant Crying in an Infant.

Dr. THEOPHILUS PARVIN touched, in a recent clinical lecture, published in the College and Clinical Record, on this subject—one usually held to be scarcely worthy of the physician's notice, but nevertheless important. The child under examination was four months old, and had cried night and day since its birth.

As a dog hunts in dreams, so this poor child, if it ever dreamed in its sleep, dreamed of crying, of pain and discomfort. It was hard, impossible, indeed, to keep it still during the examination made to ascertain if there was any diseased organ making complaint in crying. Having found that the child is not suffering with positive disease, the next question is as to its nourishment. The mother said she had plenty of milk, quite as much as she had with her first babe, which got on well. Nevertheless this babe did not seem as large and as plump as it ought to; and though the quantity of milk was ample, was its quality such as it ought to be? Putting a drop on his fingernail held obliquely, and letting the milk

run down the nail, the doctor found it scarcely left a trace remain, dropping it in a tumbler of water, each drop, as it fell, caused the faintest cloudiness. Finally a clinical assistant, made an examination with the microscope, and found the number of milk globules was very small. Thus a solution of the problem was reached; the infant was crying from hunger, and from hunger it had been crying for weary months. That this solution was correct is proved by the result of feeding the baby. In a few days it became quite happy and improved in appearance. The artificial food given this infant was cow's milk diluted with an equal quantity of barley water, and a little loaf sugar added. The practice of dilluting cow's milk with water for infant feeding is, Dr. P, believes, a grievous mistake. That sort of dilution has simply rendered the milk less nutritious, and made it necessary to give a larger quantity of food, and at more frequent intervals, in each way impairing the child's digestive power. In this case, not water, but barley water was added to the milk. So much depends upon having the barley water properly prepared, that a word about this preparation is necessary:

Take an ounce of pearl barley, and wash it in cold water, then put it in a vessel containing half a pint of water, and let it be gently heated over the fire, so that the water just simmers a few minutes; now pour off this water, replace it by a pint and a half of water, and boil down to a pint, and you then have barley water.

Pavor Nocturnus.

Dr. OSCAR SILBERMAN (*Jahrb. f. Kinderheilk.*, xx. Band, 3 Heft) after carefully reviewing the opinions of those authors who have written about the

"night terrors" of children, finds the greatest diversity of views expressed concerning the ætiology of the disease, some contending that it is an irritation of the cerebral substance, and others a disturbance of digestion, which produces a certain group of symptoms, best represented, however, according to the investigations of Silberman, by the general term "pavor nocturnus", provided that we recognize two forms of the disease, namely, an idiopathic and a symptomatic pavor nocturnus. By idiopathic pavor we understand a disease *sui generis*, originating primarily in the brain, and running its course in the central organ of imagination (cortical substance). The symptomatic pavor is a reflex neurosis characterized by dyspnœa and anxious crying, and especially caused by irritation of the vagus. The former is the most frequent, and attacks children between the ages of two and six who are delicate and easily excited, but mentally bright. The symptoms are somewhat as follows: After the child has eaten its supper with a good appetite, has gone to bed, and has slept for two or three hours, it awakes with a cry, sits up in bed with wide-opened eyes, and wrings its hands or wards something off with them; its face is often very red and covered with perspiration; the respirations and pulse are somewhat accelerated; the temperature is normal. The child is unconscious, and does not heed the soothing words of those who are around it. After ten or twenty minutes it becomes quiet, begins to cry, recognizes its friends, asks for a light, and then usually goes quietly to sleep, and in the morning has no recollection of what has occurred. No organic cause can be found for this group of symptoms, and it is rather to be sought for in the impressions made on the child's mind during the day. Anæmia, rachi-

tis and other constitutional anomalies are doubtless predisposing causes, but often fail to be found, the conspicuous feature of the disease always being an expression of fright. Dread may be objective or subjective, and there seems to be no doubt but that in the idiopathic form of this disease it is objective. The symptomatic pavor is usually found among children who are strong and are free from constitutional disease, and from a nervous temperament, some indiscretion of diet appearing to be the cause of a group of symptoms described as follows: The child eats its supper and goes to sleep as usual, but is soon noticed to be very restless, cries out, grinds its teeth, sucks its mouth, its eyes are half closed, and at times it breathes long and deeply. After this uneasy sleep has lasted for an hour or two it wakes up with an anxious cry, suffers from dyspnœa, and utters short interjections, as, ah! ah! instead of the words representing the object of its imaginative fear as in the idiopathic pavor. The attack does not last so long as in the other form. The pulse is irregular while the dyspnœa lasts, and then the child goes to sleep again, but is usually restless for the rest of the night, and the attack may recur several times in the same night. These children are also very apt to complain in the night of pain in the epigastrium, and on the next day to be found with a coated tongue, some fetor of the breath, and, perhaps, an attack of vomiting or diarrhœa. As in the other form there is no recollection of the attack on the following day.

An analysis of this second form of attack shows that it comes on slowly, gives premonitory signs of its approach, and lasts a shorter time, two to six minutes, the idiopathic form being sudden in its onset, and lasting from ten to forty minutes. The fear in the symptomatic

form is evidently caused by the dyspnœa, and the dyspnœa and irregular pulse by irritation of the vagus. Silberman then reports eleven cases; of these two were three years old, three four years, two five years, two six years, one seven, and one eight. As a summary of his article he presents the following conclusions:

1. There is a well-marked distinction between the idiopathic and symptomatic forms of pavor nocturnus.

2. While fear is common to both, it is, in the idiopathic form objective, and in the symptomatic subjective.

3. The idiopathic pavor is a disease *sui generis*, characterized by a transitory hallucination expressing objective fear, caused by abnormal irritation of the brain, and always accompanied by a defect of memory.

4. The symptomatic pavor is a reflex neurosis from the gastric fibres of the vagus to the pulmonary terminal fibres, thus causing dyspnœa and expressions of subjective fear; we here also have amnesia.—*Boston Medical and Surgical Journal*.

Cholera Infantum.

Dr. G. A. WILLIAMS, *Therap. Gazette*: In the treatment of this trouble, there is very little difficulty in distinguishing it from the simpler forms of the bowel complaints. Diarrhœa from errors in diet, malaria, indiscretions on the part of the mother, etc., terminates favorably in most cases after removal of the offending ingesta. In such cases we can assist nature, by the use of a little hydr. cum creta, and afterwards regulating the diet and surroundings. In cases complicated with malaria, of course we must use quinine combined with the aperient. If the case should assume all those severer symptoms, viz: excessive watery stools, emaciation with great prostration, then we know at once

that we have a case of cholera infantum to deal with. This trouble occurs during the heated term—no doubt on account of the extreme heat, teething, vitiated atmosphere and other influences, all of which combined, produce extreme debility, the most prominent symptom being indigestion to begin with, then weakness and relaxation of the whole system. Extreme heat, teething and other influences, are the exciting cause. The same trouble, just now, is quite prevalent with adults, only less severe, the subjects being better able to bear it and better able to take care of themselves. With adults the remedy is abstinence from food to begin with, and rest with a little brandy or ginger as a stimulant, a light, easily-digested diet, with very little meat, salt smoked meat being the best if any is taken. Thus we have the benefit of chloride of sodium and creosote, as purifiers which obviate fermentation. Strange to say, the value of chlorine seems frequently to be overlooked; it is far superior to all other agents of this kind and no doubt the anti-fermentative properties of calomel depend on the chlorine it contains. So it is with the bi-chloride of mercury about which there has been such an antiseptic craze.

The principles to be followed out in cholera infantum are two, viz: nourishment and support. Very little food to begin with, in order to give the stomach a rest and stimulants to keep up the strength. I use brandy and water very freely from the beginning and when the little patients perceive the effect of it, they take it with great avidity. In fact I consider it more important than anything else. Milk can be used with lime-water, or prepared with pancreatic extract, according to Dr. J. Lewis Smith. The lime-water keeps the milk from curdling and seems to act as a kind

of natural astringent. I also use tender raw beef, in some cases, chopped up into a fine jelly, seasoning, forming it into a little cake and warming it with a very little fresh butter, merely enough to turn it white on each side and take away the raw taste. I give as medicine, a mixture of rhubarb, soda and peppermint. Thus, for a child six or eight months old: \mathcal{R} Rhei pulv., Sodæ bicarb, ää gr. viii; Tr. ol. menth. pip., gtt. xvi; Syr. simp., \mathfrak{z} iv; Aquae q. s. ad., \mathfrak{z} ii. M. Sig. A teaspoonful every two hours when diarrhœa is troublesome.

The rhubarb and soda should be rubbed together in the mortar with a little water first, to incorporate them and then the other ingredients added. This neutralizing mixture is as old as the hills, I believe, but I don't think it is generally used. The rhubarb acts as a tonic and indirect astringent at the same time, the soda being the antiferment. Chamomile tea, I have found to be of great service, all through the disease, acting as an elegant tonic and stomachic. I have the abdomen encased in a good flannel bandage with stimulating applications. I never use astringents or opiates in any form.

Pediatric Aphorisms.

The following aphorisms of Professor LETANUNDI are quoted in *Le Dictanum* of May 10th, 1884 :

1. Children are like the mob; they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset you will congratulate yourself, but in the long run will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion ; a furious child an abdominal one ; a soporific child has both, although indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressions are so through morbid abdominal influences.

5. A sunny living-room, a clean skin, and an ounce of castor oil in the cupboard, these are three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is a waste of time to no good purpose. Croup or no croup, if there be a positive obstruction to respiration in the larynx it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among the minor surgical operations.

7. Detention is a true multiple pregnancy in which the uterus and its fœtus becomes petrified in proportion as they grow. It is not the direct or eruptive pressure, but the lateral pressure of all together, that is most dangerous. It is from this that so many cerebral symptoms appear, which can in no way be relieved by incisions of the gums. The only recourse against the dangers of this transverse pressure is to give the child more nourishment, in the hope that as the general condition is bettered the local condition will also be improved.

8. If the incisors of the first dentition are serrated it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions arising from deficiency of mineral salts in the tissues. There is only one exception, and it is an important one. When the serrated incisors are seen in strong children, in whom the fontanel-

les have closed early, it is a sign of a robust constitution. Instead of a number of small and sharp serrations, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factor in the general process known as the first dentition, is to perpetrate a sort of medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and second intestines.

10. The body of a child possesses such a degree of "acoustic transparency" that in cases of necessity or convenience auscultation may be practised with the hand, converting it into a telephone, which will reveal as much to the physician as even his ear can do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids from one in which lumbricoids are due to disease.

For in the former case anthelmintics are of service, but in the latter they do harm.

12. Since, until a child is able to talk clearly, his relations with the physician are purely objective, it is very necessary that we should study as carefully as do the veterinarians the exact correspondence between the lesions and the expression of the patients.

13. If you wish to cure rapidly and well joint-diseases in infants, you must treat them as you would a conflagration—douches, douches and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relations between children and adults should be changed. To speak to them incorrectly merely because they cannot pronounce well ; to excite their fears and arouse their weird imagination simply because they are easily fright-

ened and impressionable; to stimulate their vanity because they are naturally inclined to be vain; these and other similar actions are not only wrong, but absurd.

15. There is finally danger to the woman of contracting a vice as yet unregistered in the annals of concupiscence—mastomania, or the sensuality of nursing. When this physiological act degenerates into a vice, nursing becomes so frequent as to be nearly continuous, and the result is ruin to both mother and child. Finally, the physician must here, as always, be at once wise, discreet, of good judgment; and firm.—*The Medical Record.*

OBSTETRICS.

Injection of Cold Water to Expel the Placenta.

The injection of cold water into the umbilical vein in *post-partum* hemorrhage and adherent placenta (Dr. W. W. JAGGARD, in *Chicago Med. Journal*) was ably advocated and extensively practised by Mojon (1826), Kilian and others. The umbilical vein is divided transversely, a tube or quill fastened securely in the proximal extremity, and cold water injected slowly and carefully into the placenta, by means of an ordinary syringe. The cold water forcing its way into the placenta, distends that organ to twice its original volume, escaping through the lacerated utero-placental vessels, bathes the endometrium and stimulates the uterus to powerful contractions, usually resulting in the total separation and spontaneous expulsion of the after-birth. Stoltz and Rombach (1855) have extolled most highly this measure, while Linéard (1875) claimed that the injection of 150 grammes of

pure cold water into the umbilical vein was "the best, most reliable, and least dangerous expedient in all cases of *post-partum* hemorrhage or adherent placenta." At present this method is extensively practised in Germany, more particularly in Bavaria. Scanzoni, in Würzburg, practises this method exclusively.

[This procedure I have found a simple, safe and efficient method of removing a retained placenta. The umbilical vein is easily identified by its large size. A common quill tooth pick answers for the canula. Care is necessary to avoid the injection of air, and for that reason a gravity syringe is the best for the purpose. We heartily commend the method to the attention of practitioners as worthy of trial in every case of placental retention. It should be resorted to, whenever the placenta is not expelled within a half hour either by nature or with the aid of the Credean procedure. It should always take the place of the extremely dangerous operation of manual extraction and even of traction on the cord.]

J.

The Importance of Immediate Post-Partum Examination of the Perineum in Every Case of Labor and, when Lacerated, its Treatment by one Suture.

Dr. T. JOHNSON ALLOWAY, of Montreal, contributes to the *American Journal of Obstetrics and Diseases of Women and Children* a paper with the foregoing title, in which he offers very strong arguments to prove the advantage of the immediate operation for lacerated perineum over the remote operation. The following propositions are offered: 1. That the results obtained by immediate repair justify the operation. 2. That the operation, when performed in a way to be indicated, and when proper anti-septic precautions are observed, is free

from danger. 3. That the operation does not involve inconvenience or mental shock to the patient. 4. That the performance of the operation should be within the capability of every well-informed physician. 5. That convalescence is always perfect. 6. That an unrepaired perineum is a blemish to a woman, she is virtually a cripple, and is sure ultimately to find her way to the gynecologist for the relief of a series of uterine troubles, often induced by and depending upon this blemish.

Turning to treatment Dr. Alloway recommends the use of the single suture, and presents the following points necessary to be observed in connection with this suture. 1. Examine carefully *with your eyes* every perineum after removal of placenta. If lacerated to more than a quaster of an inch apply the suture. 2. Use one of Emmet's long, straight perineum needles with a silk suture. By the aid of a holder, force the needle through the skin in the left side of the tear half an inch from its edge, at any point between the beginning and the end of tear, but the nearer to beginning—that is, the higher up, the better will be the result. Now with the two fingers of left hand in rectum, press up the rectal wall and recto-vaginal cellular tissue, so that the needle can be rapidly, though steadily made to glide beneath this issue and over the rectum, hugging the latter as closely as possible to make its exit at a corresponding point on the opposite or right side. In tying the suture avoid doing so too tight, as it is a good plan to allow for swelling, which generally lasts for some days. 3. Be sure that the needle in no part of its course makes an exit in the vaginal surface; if so, you will probably have a pus pocket. 4. The operation is very simple and can be performed by any physician of ordinary

experience. 5. The after-treatment consists in washing out the vaginal passage night and morning with any antiseptic solution the physician is accustomed to use. *But he must do it himself*; the nurse would be as likely to pass the tube below as above the suture, *and kill all your joy*. As regards antiseptics, I use in such cases a solution of corrosive sublimate $\frac{1}{2000}$ ounce in twenty-four hours, administered at night. I find this solution as handy and harmless as carbolic acid. Tell your chemist to make a 3 ii alcoholic solution of hyd. bichl., each drachm of the solution to contain seven and one-half grains of the salt. One teaspoonful of this mixture added to a pint of water will give almost to a fraction, one part in one thousand. I have used this solution in cases of metria three times in the twelve hours, for two consecutive days, without any evidence of toxic effects from absorption. It is probably due to the formation of an insoluble albuminate of mercury which seals up all breaks in the surface for a time. 6. The suture had better be allowed to remain *in situ* for nine or ten days. I am strongly in favor of the silk; the wire suture is liable to produce a bleeding point or two on removing it. This accident might prove troublesome from absorption, which is so active at this period of convalescence. 7. The nurse is the only assistant you will require, and is, of course, in your confidence.—*Med. Med. Jour.*

Pilocarpine in Puerperal Eclampsia.

As of interest in connection with the cases which we have already reported, we note in the *Med. News* that Dr. E. MARICHAL, of Alabama, reports a successful case. One single dose of one-fifth grain of muriate of pilocarpine was

given hypodermatically, and though the women lay comatose for twenty-four hours, there were no more convulsions. Dr. M. thinks that pilocarpine is especially indicated where there is, as it were, a locking up of the secretions.

Digital Dilatation of the Os Uteri During Labor.

At a meeting of the Obstetrical Society of Philadelphia, held April 3, 1884, Professor THEOPHILUS PARVIN expressed the following views on this subject, while discussing a paper :

He would be sorry to see digital dilatation adopted as a rule for all cases. The fingers, used as recommended, did not act solely, possibly not chiefly, as dilators, but by evoking uterine contractions. Voluntary efforts at bearing down were not needed during the first stage; they were dangerous rather than helpful. The method might be useful in some cases after the rupture of the bag of waters, which was the natural dilating agent. There was also danger of septicæmia from germs on the fingers. He did not think the finger so good a dilator as Barnes' dilator, because unequal, partial pressure upon the os did not evoke the decided uterine contractions that uniform pressure generally did. He thought the danger of a change of presentation by the use of Barnes' dilator was very slight. He would prefer a mechanical dilator to the finger, whenever dilatation was necessary, but thought something ought to be left to nature. Any sort of interference involved a possibility of danger.—*Col. & Clin. Record.*

Persistent Flaccidity of Uterus after Labor.

To a recent meeting of the New York Obstetrical Society (*N. Y. Med. Jour.*), Dr. PERRY related the case of a lady,

thirty-eight years of age, the mother of five children, the youngest being four years old.

She had complained, since the birth of this youngest child, of bearing-down pain and inability to stand or walk, from the great pressure or weight in the pelvis. Menstruation occurred every three weeks, and lasted, with scanty flow, seven and eight days. On making a vaginal examination, he found the cervix in its proper position, but very short and flaccid, and, extending around it in a circular direction, a soft mass, apparently the result of a pelvic inflammation. On conjoined manipulation, the mass appeared very shallow, but nowhere could he find the fundus of the uterus. A sound was introduced, which penetrated but two inches. Not doubting that it was within the uterine canal, he essayed a little force, and with this was able to penetrate to the depth of eight inches, and, while doing so, found that the mass in the pelvis disappeared. He had, indeed, while forcing the sound upward, carried the uterine wall before it. An electrode was substituted for the sound, and a current of galvanism conveyed to the endometrium. This was done from day to day, without, at first, eliciting more than a slight flow of blood; but in time contractions followed, and finally sufficient firmness was established to justify the use of a vaginal support. At this juncture ergot and galvanism were used together, and a complete cure was eventually established. The patient has since become pregnant, and promised to do well. Dr. Perry thought this a case of subinvolution resulting from sudden and complete cessation of contraction after labor, leaving the uterus in a state of collapse; but he thought some might regard it as essentially a case of paralysis.

DISEASES OF WOMEN.

Antiseptics in Laparotomy.

The Maryland *Medical Journal* says editorially: Considerable difference of opinion prevails in reference to the use of antiseptics in abdominal surgery. A few surgeons have discarded the spray and the use of antiseptic solutions, and rely entirely upon pure water. Mr. Tait is an example of this class. His results are claimed to be better without than with the use of antiseptics. This question of the use of antiseptics in connection with abdominal surgery resolves itself into one of individual opinion, for both Tait and Keith have shown that it is not essential to their success.

In a paper read before the Section on Obstetrics and Gynecology, at the late meeting of the International Medical Congress (*Brit. Med. Journ.*, Sept. 20) Prof. Mikulicz, of Cracow, argued in favor of the necessity of antiseptics in laparotomy, as well as in all other operations attended with a loss of blood. He contended that the principles of the use of antiseptics in this operation were the same as in other great operations, but the details differed essentially in some points. The peculiarities of the peritoneum in some respects favored, and in other respects impeded, the application of antiseptics. The most important properties of the peritoneum having an influence on antiseptics were, first, the great extent of surface, which was a source of danger of cooling on exposure, of rapidly spreading inflammatory and septic processes, etc.; secondly, its great power of absorption and exudation, and thirdly, the liability to pour out plastic exudations, and rapidly to form firm adhesions; in this way foci of inflammation might be localized, and ligatures and separated masses

of tissue encapsulated. Prof. Mikulicz called attention to the following points regarding the use of antiseptics in laparotomy: 1. The peritoneum was more easily affected by septic infective matters than any other tissue, but it was not possible to use very active antiseptic measures as the danger of poisoning by the antiseptic was very great on account of rapid absorption. He held that the chief point to be attended to in antisepsis during laparotomy was the absolute withholding of septic material from the peritoneum. In laparotomy, antisepsis was pre-eminently prophylactic. It was important to cleanse and disinfect everything to be used, or which had any relation to the operation. The spray was considered superfluous in faultlessly clean rooms; but, in hospitals, it should be used for half an hour to an hour before the operation, for the mechanical purification of the air. During the operation it was useless. In operations on the stomach and intestines absolute prevention of the escape of the gastric or intestinal contents was one of the most important points in antisepsis. Drainage of the peritoneum was considered nearly always quite superfluous in operations performed aseptically, and hence was permissible in laparotomy only in rare and exceptional cases. 2. Besides direct infection during the operation, spontaneous infection might occur from collections of secretions of the peritoneal cavity. Hence the second great principle of antisepsis in laparotomy was to prevent this secretion. An accurate "toilet of the peritoneum" was of the first importance; next came the prevention of secreting wound-surfaces in the peritoneum, by the use of the ligature, cautery and suture.

Everything should be avoided which might excite the peritoneum to secretion, e.g. irritation by strong antiseptics. To

favor absorption, a compressive bandage over the whole abdomen was suggested. The pedicle might be treated either extraperitoneally or intraperitoneally, so long as the abdominal cavity was perfectly closed. The manner in which the sutures were applied to the abdomen had no influence, provided the surfaces of the peritoneum were properly united.

The views expressed by Prof. Mikulicz are both conservative and judicious, and offer an excellent guide to practice.

Prof. Karl Braun's Operative Methods In Laparotomy.

A brief review of the operative technique of Karl Braun, of the Lying-in Department of the Vienna General Hospital, appears in the *Wiener Medizinische Wochenschrift*, No. 30, July 26, 1884.

The antiseptic precautions are strict.

The room is prepared by a thorough cleansing and fumigation with sulphur, followed by a free ventilation, a moderate temperature being maintained. One hour before operating it is filled with the vapor of carbolic acid by means of a steam atomizer, after which the atomizer is no longer used.

The operator and his assistants are required to wear clean clothes, and their hands and forearms are disinfected by means of one of the efficient disinfectants. The instruments, after being passed through a flame, are also disinfected with carbolic acid. The sponges and linen used have lain for weeks in a five per cent. solution of the same disinfectant, and just before use are treated with a warm aqueous solution of thymol 1 to 1,000.

The patient is prepared by a bath and gentle purge administered the day pre-

vious. She is ætherized in an ante-room; her skin and vagina washed and disinfected with a five per cent. carbolic acid solution; warm compresses are placed over her abdomen, and these covered with a caoutchouc cloth having a long central slit; the extremities are enveloped in flannels.

The fluid contents of cysts and cystomata are removed by a trochar and the wall of the emptied cyst irrigated with lukewarm thymol water. The cyst is then drawn through the abdominal wound. Adhesions when slight are torn through by the index finger. While in cases of intra-ligamentous cystoma with mesocolon and intestinal adhesions he considers it best to cut through the mesentery, and by working with the fingers between it and the cyst wall to attempt enucleation. When adhesions of three per cent. extent exist between the cyst wall and the colon he advises that a portion of the former be cut out and allowed to remain attached, thus preventing a rupture of the intestinal canal.

In cases of ovarian cystomata the pedicle is treated by clamp compression, ligatured below and cauterized with the thermo-cautery above the clamp, the ligature used being strong silk.

If the cauterized pedicle, after being allowed to cool, is found to be perfectly bloodless, it is returned into the abdominal cavity. The division of thick omentum and tubes when necessary is by the same procedure. In cases where the adhesion of a cystomata cannot be divided, the growth is partially excised and the remainder of the sac is sewed into the abdominal incision and drained.

After enucleation the folds of the broad ligament and mesocolon are brought into exact apposition and held by deep sutures.

When intra-ligamentous cystomata

cannot be removed from the uterus they must be amputated and treated by the extra-peritoneal method.

The operative procedure in cases of solid uterine tumors is identical with Porro's observation.

In pedunculated tumors the pedicle is ligatured with a rubber cord and compressed with Leiter's wire ecraseur, and the stump cauterized. It is then treated by the extra-peritoneal method, being held in place by long needles being passed through it. In cases of solid uterine tumors attached by a broad base, the base is compressed and local anæmia produced. A circular incision made at the greatest circumference of the tumor divides it completely and removes one-half. The remaining half is enucleated from its capsule, and the latter forming the pedicle is treated extra-peritoneally. In this way both ovaries and uterus may be preserved.

The pedicles of ovarian tumors are usually returned to the abdominal cavity, while the stumps in cases of myotomy and myophysterectomy are treated by the extra-peritoneal method.

Parenchymatous hæmorrhage of the peritoneum is controlled by light touches of the thermo-cautery. Every bleeding vessel is tied with a silk ligature. At the close of the operation the abdominal cavity is cleansed with great care, and all air is carefully pressed out.

In applying the sutures care is taken that the peritoneal surfaces be accurately brought together to the extent of one cm., they being compressed in that position. The sutures used are of silk and silver wire held by shot and leaden plates. The dressing of the abdominal wound consists of a dusting of sodium benzoate, then a heavy Lister dressing of iodoform, carbolic acid gauze, absorbent cotton and Mackintosh is applied.—*Ibid.*

Subinvolution of the Uterus and Inflammation of Vulvo-Vaginal Glands Caused by Portion of Retained Placenta.

Dr. C. C. DAVIDSON (*Med. Times*): During the early part of December, 1882, Mrs. H. S., aged 31 years, called on me for the treatment of what she supposed to be gonorrhœa contracted from her husband.

The following is the history, as obtained from the patient. Her menstruation began at eighteen years, and she was regular up to date of her marriage. She soon became pregnant, and was delivered of a female child after an easy confinement, this occurring in 1878. In the month of May, 1880, she again became pregnant; a few months later she produced an abortion upon herself by means of a quill. A few days after, while lying upon her back on the floor, her child accidentally fell across her stomach with some force and causing some pain. Within twenty-four hours a pinkish vaginal discharge appeared, and a day or two later the abortion took place. While under medical treatment she received a sudden fright, which caused her to jump from her bed and run down stairs. This was followed by a severe hemorrhage, controlled, however, by the attending physician. When she was able to be about, she noticed a constant dribbling of blood from the vagina, and her menstrual discharge amounted to flooding, lasting ten days. At this time she placed herself under the care of a female physician, who treated her for several months without any benefit.

When the patient came under my care, after forming my opinion of the condition of things, I first treated the supposed specific discharge and poulticed the inflamed vulvo-vaginal glands, ordering as a vaginal injection alum and zinc; and I gave her also a mixture

containing iron, quinine, and strychnia, as a tonic. This plan of treatment was soon followed by an amelioration of the inflammatory condition, and in the space of a week the discharge ceased. I will here state that I used for the irritation of the bladder, twenty drops of fluid extract of kava kava, given by the mouth, three times daily, with marked success.

While my treatment of the inflammatory condition was a success, the treatment to arrest the constant dribbling of blood was to a certain extent a failure. She had taken *ol. erigeron*, *Canadensis*, *ergot*, chloride of ammonium, etc., which held the bleeding in check, but never completely arrested it.

Having come to the conclusion that the hemorrhage came from some intra-uterine growth or the remains of the placenta from the abortion, Dr. E. P. Bernardy was called in consultation on January 31, 1883.

After making a thorough examination, it was decided that the hemorrhage arose from a diseased condition of the endometrium, with likelihood of presence of remnants of placental tissue. Prior to our coming the next day, the patient was instructed to wash out the vagina with a solution of potassium chlorate (3 ii to aqua Oss). A large sponge tent was then introduced, and left in position for twenty-four hours.

The sponge tent being taken out February 1, 1883, the os was found perfectly dilated. It was hooked with a double tenaculum and the uterus pulled down. On introducing the finger, the lining of the cavity was found roughened, and in the upper left corner of the uterus an elevation. On scratching with the finger-nail, a piece was torn off, which on examination was found to be placental tissue. The uterus was well curetted and thoroughly cleansed of all adventitious material, about a table-

spoonful of which came away. After the curetting was completed, the cavity of the uterus was thoroughly swabbed out, several times in succession, with Churchill's tincture of iodine; all signs of hemorrhage ceased, and the uterus contracted nicely. The vagina was washed out with hot water, the patient placed in bed, and a suppository, containing opium and belladonna, was given by the rectum, to be repeated every four hours; three grains of quinine were taken internally every three hours. The patient was requested to lie in bed and keep perfectly quiet for a week. There was no bloody discharge, and at the end of ten days the patient called at my office. Examination with the sound found the uterus reduced to three inches. I made an application internally of equal parts of tinct. iodine and glycerin, and at the same time I enjoined the patient to go home and remain quiet; instead of which, she went out shopping, walking about thirty blocks, the same evening attended the theatre, and wound up with a late supper.

Next morning I was sent for. Found the patient suffering excruciating pain in the lower part of the abdomen, pulse 120, temperature 102° F., and slightly delirious. Diagnosed pelvic cellulitis, and applied hot poultices to the abdomen; administered internally one grain of powdered opium every two hours, and a fever-mixture containing one drop of tinct. *aconiti radiceis* with each dose. My next visit found the patient easier. This treatment was continued for several days, the patient gradually improving. In the left inguinal region I could then feel a hardened mass.

Dr. Bernardy was again called in, and, on making a vaginal examination, a large indurated mass, partly surrounding the uterus and pushing it down, was

found on the left side of the pelvic cavity. By making combined external and internal palpation, the mass was easily outlined. My diagnosis was confirmed, and it was decided to apply a blister externally, with opium-and-belladonna suppositories to allay pain, hot-water vaginal injections, and internally a mixture containing hydrarg. chlor. corros., potassium iodid., and ammonium chloride.

The mass was of such a size that it pressed upon the sacral plexus of nerves, producing the most agonizing pain running down the leg, the pain being somewhat relieved by applying veratria ointment along the nerve and keeping the limb well wrapped in cotton-wool. Under treatment the mass was slowly absorbed, and the patient gradually regained her health.

From a study of this case we learn that palliative treatment for hemorrhage was of no avail. It has taught me two things :

First. In all cases of obstinate hemorrhage from the non-pregnant uterus, to dilate the uterus and examine the cavity—that is, if the hemorrhage be not caused by a cancer of the neck or a vaginal polypus.

Secondly. In making any internal application to the cavity of the uterus, the patient ought to be told of the risk she assumes if the physician's orders are not implicitly carried out. I am satisfied that the above attack of cellulitis was brought on by the patient's indiscretion.

A New Abdominal Drainage Tube.

Dr. H. MARION SIMS.

The accompanying cut gives a very good idea of an abdominal drainage-tube which I had made last winter. It acted so nicely and drained the pelvis so well that I wish to call the attention

of the medical profession to it. It consists of a large and a small tube made of hard rubber. The smaller tube is inside of the larger one, running along the posterior wall, and terminating about an eighth of an inch from the bottom. The large tube is perforated on the sides and curved on the top, so that, when in the abdominal wound, the top of the tube projects nearly over the symphysis pubis. The smaller tube is for the purpose of washing out the peritoneal cavity, the water being thrown in at the



bottom of the cavity instead of at the top, as in most drainage-tubes. I attach a small rubber tube at B, and force the water to the bottom of the tube C with a Davidson's syringe. At the mouth of the tube A, I attach a larger rubber tube, and, while washing out, the water runs into a bed-pan or any convenient vessel placed in the bed. Where drainage is constant and very profuse, the rubber tube can be long enough to hang over

the side of the bed into some vessel placed there. By having the smaller, or washing-tube project through the dressing on the wound, the pelvic cavity can be washed out without removing the dressing, which will remain dry and clean. This tube is made by Mr. Ford, of Caswell, Hazard & Co., and can be had in three or four sizes.—*N. Y. Med. Journal*.

Rapid Dilatation of the Female Urethra for the Cure of Cystitis.

Dr. A. R. DAVIDSON, (*Buffalo Medical Journal*): Mrs. B., aged 60, mother of twelve children, had enjoyed excellent health up to eighteen months ago, when she commenced to experience pain in the bladder and frequent painful micturition. The irritability of the organ gradually increased, and for the last six months she has been tormented by the imperative necessity of making water every fifteen minutes to one-half hour, enjoying no rest day or night. She had been in the hands of several physicians, and had received the usual treatment for chronic cystitis without obtaining relief, and at last consulted an eminent practitioner of this city, who kindly referred the case to me.

The urine at this time was found to be highly ammoniacal and to contain much blood and pus intermingled with numerous crystals of triple phosphates. The microscope showed, also, soft flocculent masses made up of spindle-shaped cells with very distinct nuclei. Every day the patient passed, per urethra, considerable masses of triple phosphates, very rough and having many branched projections. The quantity of pus, blood and débris from the bladder made it impossible to distinguish kidney epithelium or casts with certainty. The considerable albumen present might be accounted for by the quantity of pus and

blood. At the first examination, the extreme sensitiveness of the bladder made a careful sounding impossible, but it was easy to find many small calculi, such as she was daily voiding. A decided thickening and rigidity of the base of the bladder could be felt by vaginal examination, but she complained of so great pain upon any pressure that I deferred a more careful examination until she was etherized.

The patient willingly consented to any operation which would promise relief from her torment, and on the 13th of August, having placed her under the influence of ether, the sound and vaginal examination of the walls of the bladder quickly demonstrated the absence of any large stone. I therefore proceeded to dilate the urethra, using the little finger first, and following it with the index finger. The base of the bladder was then found to be coated with a phosphatic concretion deposited upon small, reddish, flesh-like masses, which were easily scraped off with the finger nail. The bleeding was not great; as the growth seemed to be confined to the mucous membrane; I have little doubt that it was innocent villous growth. As Ultzman points out, these do not give rise to a thickening of the coats of the bladder, that is, there is no infiltration of the tissues. Villous cancers, on the other hand, give rise to tumors of the bladder or to thickening, which may be felt through the rectum or the abdominal walls. The patient made a rapid recovery. She complained of some soreness during micturition, and blood and pus were present in the urine for a few days, but the severe pain and frequency of micturition were absent from the moment of the operation. Subsequent treatment consisted of milk diet, regulation of the bowels, iron internally, and, for a week daily, washing out of the

bladder. At that time all blood and pus had ceased; the urine was clear and normal in its reaction, and up to the present time (six weeks after the operation) she is free from all untoward symptoms.

The treatment of chronic cystitis by drugs, and its local treatment by injections, are almost always tedious, often unsatisfactory, and not rarely altogether unsuccessful. The treatment here adopted, viz., the rapid dilatation of the urethra, has been condemned by many excellent authorities, and as highly commended by others. It is by no means new, having been recommended and described by Marianus Sanctus in the sixteenth century, Douglass and Bertrandini, in 1769, performed the operation gradually, by tents made from the roots of plants or by sponge covered by parchment, but these early operations were for the extraction of calculi and foreign bodies. Sir Astley Cooper devised a metallic expanding dilator, but modern impetus to the employment of the operation was chiefly given by the late Prof. Simon, of Heidelberg. He recommended the dilatation of the female urethra for the following objects: 1. The diagnosis of diseases of the mucous membrane of the bladder, and of the calculus and other foreign bodies. 2. The removal of calculi and foreign bodies. 3. For applying various remedies to the internal surface of the bladder and for treating fissures of the urethra. 4. For the diagnosis of the position and attachment of tumors in the vesico-vaginal septum, and for the removal of tumors, especially papillary growths, from the walls of the bladder. 5. For the discovery and removal of calculi from the vesical extremities of the ureters. 6. For the opening of hæmato-metra, the evacuation of which, between the bladder and rectum, is impossible or dan-

gerous, as, for example, in the case of congenital absence, either partial or complete, of the vagina. 7. For the treatment of vesico-intestinal fistula.

According to Dr. Simon, in adult females the urethra may be safely dilated by means of plugs, having a diameter not exceeding two centimeters. In two cases he carried the dilatation one centimeter further (about one and one-half inch) with the result of having incontinence of urine, though not permanent, both cases.

The principal opponent to the operation, at the present time, is one whose opinion is entitled to the utmost respect, from his vast gynecological experience. Dr. Emmet, of New York, reports that in eleven cases operated on by himself, two had permanent incontinence and that he had seen this misfortune to follow the operation in at least half a dozen cases in the hands of other surgeons. Moreover, he knew of no benefit from the proceeding in chronic cystitis. On the other hand, Noeggerath, Munde, Goodell, Cronyn, of this city, and others, strongly advocate and frequently practice it. It has been suggested as an explanation of ill results of the operation in Emmet's hands that his index finger has a considerable greater diameter than two centimeters.

The experience of many operators would seem to show that the operation is free from danger of subsequent permanent incontinence of urine, if the urethral tissues are fairly healthy, and the dilatations be not carried to an extent greater than is necessary for the introduction of an index finger of medium size. The ability to thus examine the entire internal surface of the bladder with the finger (by perineal section of the urethra, the male bladder may be almost as easily examined as the female) offers a valuable addition to the means ordi-

narily employed for the more difficult and otherwise intractable cases of urinary diseases which come before us.

[The above history is extraordinary. To cure a case of cystitis, complicated with phosphatic concretions deposited upon a villous growth, in one week is truly marvelous. The patient was 60 years old, which makes the results more wonderful. Those who have advocated rapid dilatation of the urethra for the cure of cystitis will find in this case encouragement to stick to the treatment, but we doubt if they will ever equal the results, obtained by Dr. Davidson.]

A. J. C. S.

Is a Woman with Amenorrhea Marriageable?

The following is from an able lecture by J. Matthews Duncan (*Medical Times and Gazette*): The commencement of menstruation may be long delayed, or the function may never be established—*emansio mensium*—a condition often the result or accompaniment of bad health, always a very important matter in social respects. Such women may have no internal genital organs, or only part of them, or only imperfectly developed organs; and there may be no ground for suspecting imperfection, the women being vigorous, and in all other respects fine specimens of the race. Of this you may remember a case lately in "Martha," where we could detect no genital organs internally by careful examination. Treatment for *emansio* is generally set agoing early and pursued diligently; and soon the question arises how long is it to be pursued? There is little difficulty in the earlier years if the girl is chlorotic or otherwise in bad health, for these conditions urge the practitioner. There is little difficulty also, if the girl is ill developed in her general bodily figure, if she is still plainly

a mere girl. But it soon, in all cases of entire absence of menses, becomes desirable to know whether or not she can menstruate or should be expected to menstruate; and this especially in robust, healthy women. In any case it is common to delay local examination till the age of nineteen or twenty is reached, and then it is done only with the approval of the patient. But necessity for examination may be precipitated by a proposal of marriage. A woman is not wise to marry who has imperfection of the genital organs. In ordinary circumstances regular menstruation is held as sufficient evidence of perfection. When menstruation has not been commenced it is necessary to make examination to ascertain if they are perfect in form and size so far as examination can decide. If they are well sized and well formed it is still a matter for consideration whether or not the married state should be entered upon. Were it certain that a woman who has never menstruated cannot bear a child, she should not be married, but it is known that, while pregnancy is not to be expected, it may occur and be successfully carried on.

I have said that the establishment of menstruation is held, in ordinary life, as sufficient evidence that a woman is marriageable so far as her genital organs are concerned. But this is not a warranted conclusion, and it remains as a practical guide only, because imperfection is very uncommon, and still more rare in women who menstruate. It is a very interesting and still unsolved question—how small a womb can be successfully pregnant. Certain it is, that a very small one may be unsuccessfully pregnant. Long ago I published a case, where a womb was well ascertained to be not above two inches in length from os externum to inside of fundus. This woman was repeatedly pregnant, and

had early abortions, and in one of these which I examined, there was marked hypoplasia of the decidua. Under the influence of repeated pregnancies the woman's womb did not increase in size—it remained an under-sized organ. It has been fondly imagined that a womb may be made to grow—a natural or healthy growth—and to menstruate—not merely bleed a little—by irritating it with intra-uterine pessaries; but there appears to me no rationality in such expectations, and I advise you not to resort to such treatment. There are other evident objections to it besides the danger of it inducing inflammation, and even causing death. If repeated pregnancies do not make a womb grow to its natural bulk, a rod of metal inserted into it is not likely to make it grow or to do anything but harm.

While, with the restriction stated, regular menstruation is held as evidence of marriageableness, you must not hold that absence of menstruation is proof of the opposite. A woman may have every quality or attribute of marriageableness who menstruates irregularly, or rarely, or even who has never menstruated at all.

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The Castration of Women.

The *Medical Times and Gazette* says:

A recent number of the *Zeitschrift für Geburtshilfe und Gynäkologie* contains an article by Dr. WILHELM TAUFER, of Buda-Pesth, on the above subject. He relates twelve cases of this operation performed by himself, and then presents the conclusions which follow. We cannot say that this author is as cautious in drawing inferences as we should like, but we give his propositions, which must be taken for what they are worth :

1. Castration is an operation which

with proper care is not attended with any great risk; the unavoidable mortality being now less than ten per cent.

2. The operation should be performed with antiseptic precautions and under carbolic spray; the abdominal cavity should be closed; drainage is only exceptionally required.

3. The limitation, that castration is not called for when the climacteric is near, can only be conditionally accepted, because the age at which the climacteric occurs is very different in different individuals, and cannot be foretold.

4. The conditions laid down by Hegar, that the ovaries should be distinctly felt before their extirpation is attempted, is an impracticable one.

5. Both ovaries should be removed, even if the disease be limited to one, excepting in cases where special circumstances make it desirable to leave behind the apparently healthy ovary. The reason for removing both ovaries is that the remaining gland has a tendency to become diseased in the same way as its fellow.

6. It is generally desirable to remove the tubes as well as the ovaries; and it is unconditionally necessary if there be the slightest appearance of disease in them.

7. Hystero-epilepsy is curable by castration.

8. The symptoms grouped together under the name of hysteria, when rightly analyzed, can often be traced back to ovarian disease.

9. The question as to the influence upon uterine fibroids of the ligature of large nutrient vessels going to them, without castration, is worth consideration.

10. With regard to prognosis, it is important to remember that the menopause only follows immediately upon

the operation in those cases in which the neighboring organs are not diseased; but all inflammatory conditions of them delay the climacteric.

11. The final result of castration can only be determined after the lapse of months.

12. It must be regarded as an open question how far diseases of the female sexual organs influence the development of certain psychoses.

13. So must the question whether such psychoses are curable by castration.

14. In the interest of unity and comparison of observations, it is desirable that the classification of cases (suitable for this operation) adopted by Hegar should be generally accepted.

Treatment of Chronic Vaginitis.

Dr. Martineau has found, at the St. Lourcine Hospital, that salicylic acid mixed with powdered gum-arabic and wheat flour, according to the following formula, gives good results:

R. Salicylic acid, 3 parts; wheat flour, 5 parts; powdered gum arabic, 1 part. This powder is applied to the whole of the internal surface of the vagina by means of an insufflator.—*Ann. des Mals. Genito-Urin.*

[This method of treating vaginitis is certainly preferable to the usual method by injections. We have employed the tampon of marine lint or the medicated cotton with great advantage. By that means the inflamed surfaces are kept apart, and the discharges taken up and disinfected. Dusting the parts over with bismuth powder before using the tampon is also of service.] A. J. C. S.

The Frequency of Antelexion.

A recent number of the *Centralblatt für Gynakologie* (*Medical Times and*

Gazette) contains a report of the meetings of the gynecological section of a German scientific association, held at Freiberg, under the presidency of Dr. Freund, of Strasburg. Among other communications of interest a paper by Bandl, of Vienna, occupied the attention of the congress, the full title of which runs, "On the Normal Position and Normal Shape of the Uterus, and the Anatomico-Pathological Causes of Apparent Antelexion." Our readers will be well aware that antelexion of the uterus is by many regarded as a morbid condition, causing numerous and varied symptoms, and seldom existing without some disturbance in the functions of the affected organ. This view has lately been controverted, the most elaborate attacks being those of Herman and of Vedeler. The chief ground of opposition—Herman's main argument, and Vedeler's only one—is that they find antelexion very common, and just as frequent in those who are healthy as those who suffer from uterine disturbance; and they therefore conclude that it is one of the natural shapes which the uterus may have. To this question Bandl has directed his attention. He has investigated the frequency of antelexion in three ways: (1) By the examination of patients simply. (2) By the examination of patients upon whom abdominal section was about to be performed, and in whom the idea of the shape and position of the uterus gained by vaginal examination could afterward be verified or corrected by subsequent examination from within the peritoneal cavity. (3) By examination of dead bodies. By the first method, Dr. Bandl found that apparent antelexion was exceedingly common, but, as it is not stated that he examined any women who did not complain of functional uterine disturbance, his results do not tell either for or

against the views of Herman and Veder. The cases in which the conclusion arrived at by vaginal touch was checked by examination from above after the abdomen had been opened were very few. The author found in them the uterus slightly bent forward. His post-mortem researches were made on two hundred bodies—of children, virgins, and parous women. He found sometimes ante flexion existing before the uterus was removed, but that after the uterus was taken out of the body it became straight. In only four cases did he find ante flexion persisting in a uterus severed from its attachments. Dr. Bandl unfortunately does not give any numbers except those we have quoted. This result of post-mortem research is susceptible of several explanations. It may be said the ante flexion is a condition temporarily produced by the method of examination; or that it is usually a result of forces acting on the uterus during life, and seldom a shape properly belonging to the uterus and retained by it or that its losing its curve after removal (a fact in which our own experience accords with that of Dr. Bandl) is a result of post-mortem change. Which ever be the explanation preferred, it does not seem to us to affect the argument based on the identical frequency of an ante flexion in health and disease, because if any objection founded on it be taken to the results of examination of the healthy, it applies equally to those gained from the other class.

DISEASES OF CHILDREN.

Diagnostic Symptoms in the Diseases of Children.

POLITZER gives the following concerning the value of certain symptoms in children's diseases (*Deutsche Med. Zei-*

tung, May 19, 1884): 1. The symptom of a strongly-marked nasal tone in crying points to the probable existence of a retro-pharyngeal abscess. 2. A loud and very long-continued expiratory sound, with normal inspiration and the absence of dyspnoea, is significant of chorea major. Sometimes this sound resembles the bellowing of an animal, and may continue for a long time as the only symptom of chorea. 3. A thoracic, sighing inspiration indicates cardiac weakness. This is one of the first symptoms, appearing before cyanosis or pallor of the face, thready pulse, coldness of the extremities, or the other well-recognized signs of weak heart. 4. A marked diaphragmatic expiration, accompanied with a fine, high-pitched whistling, points to bronchial asthma. 5. A marked interval between the end of expiration, and the beginning of inspiration renders the diagnosis of catarrhal laryngitis without exudation probable. 6. There is no special significance in the loud, sort of bleating expiratory sound sometimes observed in infants during the first months of life. It seems to depend upon a modified innervation within physiological limits, and resembles the want of rhythm in the cardiac movements occasionally met with in the early years of childhood.

The following symptoms are indications of cerebral diseases: 1. A peculiar drowsiness, continuing for several days, unaccompanied by fever or other disturbance, is indicative of basilar meningitis. This is a more valuable sign than headache, vomiting, or a slow, irregular pulse, since the latter may occur in various extracranial diseases. 2. A tense, elevated anterior fontanelle points to intracranial effusion. If it be very prominent, resistant to pressure, and without a sign of pulsation, there is almost certainly an intermeningeal hem-

orrhage. A deeply-sunken fontanelle indicates inanition and a diminished volume of blood. 3. Very slow movements of the eyes, followed by fixity in one position, a vacant stare, and a peculiar lazy closing of the lids are signs of a beginning basilar meningitis. The character of the cry is of value sometimes in the diagnosis. 1. A fit of shrill crying, lasting for two or three minutes, accompanied by an expression of fear in the face, and coming on regularly an hour or an hour and a half after the child has gone to sleep, is the expression of night terrors. Quinine, given in a rather large dose one or two hours before bed-time, is an effectual remedy against this trouble. 2. Periodical crying-spells, of five or ten minutes' duration, coming on sometimes during the day but more frequently only at night, point to cramps in the bladder, provided that we can exclude intestinal or gastric colic. This is speedily cured by emulsion of lycopodium with or without belladonna. 3. Crying while at stool and an evident dread of the act of defecation are signs pointing to fissure of the anus. 4. Hard, continuous crying, expressive of severe pain, together with frequent putting of the hands to the head or rolling of the head in the pillow, are evidences of otitis media or pain in the ear from some other cause. 5. When for days and weeks the child cries on being moved, and when there is also profuse sweating and an elevated temperature, the disease is rickets. 6. Frequent crying, with habitual sleeplessness during the first two years of life, are found in anæmic and poorly-nourished children, or in those with congenital syphilis. He also recounts some other single symptoms which aid in diagnosis. 1. The peculiar physiognomy of children suffering from congenital syphilis. The sinking in of the root of the nose, the

sallow complexion, the scanty eyelashes, the yellowish edges of the eyelids, and the rhagades on the underlip are characteristic of hereditary syphilis. 2. A falling together of the alæ nasi, and an absence of all motion in them during inspiration, point to hypertrophy of the tonsils. 3. A weakness and loss of motion out of all proportion to the gravity or duration of the accompanying illness should raise a suspicion of infantile paralysis. 4. A partial loss of hearing after a sickness is often due to a circumscribed meningitis at the base of the fourth ventricle. 5. Depression of the mental faculties occurring after a severe infectious disease is frequently indicative of a beginning acquired idiocy. Strychnine exerts a favorable influence in these cases. 6. Retarded ossification of the skull may imply rachitis. 7. A stiff carriage of children in walking, standing, sitting down, or stooping, is observed in commencing Pott's disease. In children who do not walk there is a painful contraction of the features when they are lifted up or set down. 8. Constant vomiting of all ingesta, lasting for several weeks, in children with large heads but closed fontanelles, is a sign that an acute hydrocephalus is engrafted upon the chronic condition.

The Treatment of the Navel in New-born Infants.

The two dangers which are to be avoided in the treatment of the navel-string are: (1) hemorrhage from the stump; (2) inflammation of the navel and its consequences. When the child begins to breathe, a complete change in the conditions of the circulation, of course, takes place. Within ten minutes after the ligation of the navel-string the pulsation in the stump has ceased, as a rule. On account of the freedom from

umbilical hemorrhage, which usually obtains in animals and in certain primitive races of men among whom ligation of the navel-string is not practised, it has been proposed by some to do away with the custom of tying as unnecessary, but this proposition has not been received with favor by the conservative element of the profession. Hemorrhage may occur hours or days after birth from causes which produce increased activity of the heart, or as the result of obstruction in the venous system. This action is especially to be feared in the case of immature and asphyxiated children. The double ligature of the cord, that is, at both the fetal and the placental end, is advocated in all cases as the safer method, especially since one does not always foresee a possible twin pregnancy, and hemorrhage from an unligatured cord in such a case might be an unfortunate occurrence. The authors are not in favor of ligation immediately after birth, nor do they think it desirable to await complete cessation of pulsation of the umbilical artery. There is some danger in either procedure, and an interval of two or three minutes from the time of birth is thought to be sufficient to obviate that danger. The materials which are recommended for the ligature are carbolized silk or hempen cord, or some form of elastic ligature. Säuger recommends penetration of the cord with a needle, and winding a suitable ligature around it at both ends, but the authors do not think well of the plan. If elastic ligatures are chosen, either thin rubber-bands may be used or small drainage-tubes. Greater security will be obtained by winding them two or three times around the cord before tying. By the eighth or tenth day not only should the stump have been cast off, but also the navel should be entirely healed. As to the

treatment of the cord after ligation, the less it is interfered with the better. Of course the less moisture it receives the sooner it will mummify and drop off. The cotton or linen in which it is wrapped should be changed daily, cleanliness being an important feature of treatment. Säuger and Fehling recommend that a layer of salicylate of starch be sprinkled upon the bandage which is to be secured around the stump. Extensive antiseptic precautions in a matter of this character are thought to be unnecessary. In some cases they are, doubtless, harmless.—*Archiv. f. Gynäkologie B. xviii., H. I. Archiv. Pedratries.*

OBSTETRICS.

When to Bleed a Pregnant Woman.

In his address on "Lacerations of the Female Sexual Organs," before the last meeting of the American Medical Association, the late Professor S. D. GROSS says :

"If I were asked under what circumstances a pregnant woman, in sound health, without any complications, ought to be bled, I should answer, first, when she is threatened with abortion, miscarriage, or convulsions ; secondly, when there is a rigid os, obstinately refusing to yield after the labor has been in progress for six, ten, or twelve hours ; thirdly, as a rule, in tardy labor in primiparæ, especially after the age of thirty ; fourthly, where there is, so to speak, rigidity of the general system, including, of course, the sexual organs ; fifthly, when there is a decidedly feverish condition of the system, associated with severe headache, great heat and dryness of the genital organs, a rigid os, or os and perineum, and inefficient, ceasing labor-

pains ; and lastly, in torpor of the uterus from the effects of inflammation, gout or rheumatism, interfering with or retarding delivery. In all, or, certainly, in most, of these conditions, I should follow up the effects of the bleeding with an anæsthetic, or a hypodermatic injection of morphia. I solemnly believe that if these rules were properly observed, the process of parturition would be greatly facilitated, the pains of labor materially abridged, and the risk of laceration, which now stand as such a blot upon obstetric practice, would be reduced to the merest minimum, not to say anything about the much greater safety of the child, and the more rapid recovery of the mother.

"As to the quantity of blood to be abstracted, every case must be met on its own merits. While in some instances the loss of a few ounces may suffice, in others, especially in strong, robust, plethoric women, sixteen, twenty, or even thirty may be required."

The famous Dr. Battey, of Georgia, in discussing Dr. Gross's paper, said: "In summing-up of my obstetrical experience is (to put it in a word), in looking back over it, in not a single instance have I regretted the use of my lancet in obstetrical practice. In many, many instances, as I now recall them, I think that positive good would have grown out of the more frequent use of it. I bleed, sir, still."—*Med. and Surg. Record*.

[These views, as a whole, hardly meet the approval of latter-day obstetricians. Most practitioners will still consider it irrational to bleed for threatened abortion, a rigid os, or perineum, or for the exhaustion of prolonged labor, despite the high authority of the writer.]

Combined Version in Placenta Prævia.

C. BEHM (*Centrab. f. d. gessammte Therap.*) has used combined version in

forty cases of placenta prævia without a single death. This must be regarded as an extraordinarily good result for a condition that ordinarily yields a mortality of forty per cent. Hofmier has already obtained similar results in the treatment of placenta prævia.

The operation is performed as follows: When dangerous hemorrhage comes on the vagina should be tamponed until the cervix is closed. This being done, and the woman anæsthetized, the whole hand is introduced into the vagina and two fingers into the cervix. If the membranes present, the operator endeavors to rupture them with the finger, then draws the presenting part (unless it be the buttocks) to one side, at the same time making pressure from without so as to carry the buttocks down until he can grasp a foot. This is drawn through the cervix, so that the breech acts as a tampon on the lower segment of the uterus, and the placenta is pressed against the sides of the uterus. In central implantation of the placenta the finger should be pushed through the center.

After this version the operator waits for the spontaneous expulsion of the child, or at least complete spontaneous dilatation of the cervix in order to complete delivery. The duration of labor after version is from one-half hour to eleven hours, the average time being one or two hours.

The mortality for the children by this procedure is very great, but the chances for the mother are better. The mortality for the children, however, is no greater than by the old operation.—*Obsbt. Gazette*. [It has always been our teaching that early resort of bipolar podalic version is an important general rule of practice in placenta prævia. It is not called for in every case. Much must be left to the judgment of the

accoucheur. There can be no routine method of treating placenta prævia. Again, after great loss of blood, injurious or even fatal shock is often the result of two violent or precipitate interference.]

Moot Points in Regard to Inversion of the Uterus

Was the title of the first paper, read by Dr. JOHN C. REEVE before American Gynæcological Society. It dealt with the causes and the mechanism of the lesion, and the medico-legal importance that sometimes attached to them. In the vast majority of instances, as was conceded by all writers, inversion of the uterus took place only as an accident of delivery or as the result of the sudden expulsion of polypus, but very high authorities had admitted that hydrometra and hæmatometra might lead to its occurrence, although the supposition had not been proved by actual cases. In regard to such a subject, however—a rare accident, happening oftener in cases attended by midwives and other ignorant persons than under competent observation, and calculated, by the suddenness of its occurrence and by its appalling nature, to interfere with cool judgment—it was allowable to reason in relation to certain points in the absence of precise data. The first question he would discuss was, therefore, *Could inversion of the uterus occur wholly independently of pregnancy or of polypus?* It was evident that hydatids furnished the conditions admitted to be requisite, namely, distension and sudden emptying of the organ; but he would exclude that affection also from his question. With a healthy uterus, probably there could be no inversion independently of the conditions mentioned; but it had first been affirmed by Puzos that certain pathological changes in the organ might favor its oc-

currence. Mme. Bolvin had coincided in this opinion, and Tyler Smith had maintained that inversion had actually happened from such a cause, the particular occasion being spasmodic action of the uterus coming on in the course of long-continued menorrhagia. On the other hand, Duncan and West had denied the possibility of such a thing, the former arguing that the uterine wall was so thick and firm that it could not be indented. This argument, however, ignored pathological conditions of the organ, and therefore was irrelevant. Duncan himself had shown that an enlarged and softened state of the uterus was not rare in connection with disease. Such changes need not be very marked to produce the result, as was shown by the occurrence of inversion after abortion, of which there were many cases on record. The condition termed by Rigby the "squatty uterus" seemed to have been observed by Mme. Boivin, and, in our own time, had been well described by Dr. Isaac E. Taylor, of New York. But, to come to facts, there were three cases which seemed to settle the matter; one related by Baudelocque, one by Boyer, and one by Dr. T. Gaillard Thomas, of New York. The latter case was that of a young woman who had one child, seven or eight years before, but had not been known to have any uterine disease. She made a violent effort in a game of ten-pins, and suddenly felt something give way within her, accompanied by intense pain. The family physician made a vaginal examination and found a protrusion into the vagina, which he took to be a polypus that had suddenly been expelled from the uterus. The late Dr. Willard Parker, who was called in consultation coincided with this diagnosis, and removed the supposed polypus, but found at once that he had removed the uterus,

which had suddenly become inverted. The patient recovered.

The next question was, *Did inversion of the uterus always begin at the fundus, or did it not sometimes begin at the cervix?* Most writers had denied the possibility of inversion originating by a rolling out of the cervix, while some, like Dr. Thomas, had merely stated that its occurrence was not proved. Tyler Smith had been credited with having upheld the doctrine, but he (Dr. Reeve) had not been able to find that author's enunciation of it. There was strong analogical evidence in its favor, the process being held to be like that by which a prolapse of the rectum or an intussusception was produced. The organ must have become soft and flabby to admit of it, however. In proof of the possibility, reference was made to an essay by Dr. Isaac E. Taylor, who had given three cases, one of which had come under his own observation. On the whole, the evidence seemed to be strong enough to warrant the affirmation that inversion might begin at the cervix.

The next question was, *Did puerperal inversion of the uterus ever occur except at or immediately after delivery?* Upon this question turned that of the responsibility of the accoucheur, who could not be held blameless if he overlooked an accident usually so marked in its symptoms, provided it were established that it always took place at a time when he was or should have been present. The question, therefore, was one of medico-legal importance, and in that connection reference was made to a case that happened in Chicago a number of years ago, in which a physician took legal proceedings against the patient's husband, who had repeatedly charged him with incompetence in the management of the case and had coupled abuse with his criticism. The suit went against the physician, but, turning as it did upon the

question now under consideration, it was doubtful if the decision was a just one. When there was nothing at the time of labor, or during the usual period of attendance, to show that anything was wrong, but symptoms of inversion came on suddenly afterward, could it be held, nevertheless, that the accident had really occurred at the time of the confinement? Such instances were not rare, and in one case a year had elapsed between the labor and the recognition of the inversion, although there had been profuse and repeated hemorrhages in the interval. Under such circumstances, it was incumbent upon the practitioner to endeavor to detect the presence of inversion. Several cases were cited to show the possibility of puerperal inversion coming on after the lapse of a considerable length of time, and the frequency with which secondary hemorrhage and relaxation of the uterus were observed was spoken of as supporting the idea.

The fourth question was, *Could inversion take place without symptoms sufficient to attract attention or to indicate that anything had gone wrong?* Striking as the symptoms usually were, several cases were cited to sustain an affirmative answer to this question, and it was therefore concluded that it must be so answered.—*N. Y. Med. Journal.*

Abortion.

In threatened abortion we have frequently used half drachm doses of the fluid extract of conium with the best possible results as regards the prevention of this untoward event.

Pruritus Vulva.

The following formula is from R. S. Newton, M. D.: \mathcal{R} —Pulv. borax, \mathfrak{z} ss.; sulphate of morphia, gr. vj.; decoction of hydrastis, \mathfrak{z} viij.

DISEASES OF WOMEN.

Atresia Vaginæ with Retention of Menses.

Dr. E. E. MONTGOMERY reports a case, the history of which appears in the *Med. Med. Jour.*, as follows: Miss F., æt. 44, single, of healthy parentage, was brought to my office July 5th, 1884, by Dr. Sibbald, of Wissahickon, with the following history: She commenced menstruating at 16, and continued without disturbance until her 30th year. Two years previously she had fallen upon a curbstone, receiving quite serious spinal injury, which lasted a year, when she fully recovered. The menstrual periods, which were always regular, lasting from three to four days, normal in quantity and color, at 30 became painful. Since then the pain has been constant and increasing with each period. The discharge now lasts from seven to ten days, is of a dark bloody nature and offensive odor. During the menstrual interval there is a continuous discharge of "corruption," as she calls it, necessitating the constant wearing of a napkin, and producing excoriation. All of these symptoms have been increasing during the past eight years, and she has been compelled to discontinue work a week or more at a time. She complains of a sensation of weight or pressure in the pelvis, attended with severe pain during defecation. There is pain during micturition. Her nervous system has become much affected. Upon examination, the vagina was found relaxed and the external parts red and bathed with secretion. The vagina was about two inches long, ending above in a lateral cicatrix. No uterus could be felt. Upon withdrawal, the finger was found bathed with a dark, thick, highly offensive discharge. The use of a Sims speculum disclosed a

cicatricial line running from side to side across the fundus of the sulcus, just posterior to which the membrane looked thinner. Slight pressure against this with a sound perforated it, and was followed by a profuse discharge of broken-down blood and pus. A pair of Ellinger's dilators was then introduced and spread to their full extent; over four ounces of the fluid flowed out. The cavity was then washed out with a carbolyzed solution. In this cavity above the cicatrix the uterus was found retroverted and firmly fixed, forming the roof. The cavity was dressed with carbolyzed glycerine on cotton. Subsequent treatment was conducted by Dr. Sibbald. He informs me that there has been no difficulty since, and that she now feels perfectly well.

Dr. W. H. Parish—That the treatment adopted in this case was proper the results showed, though it was not in accordance with the treatment directed by the text-books. We are there told to puncture the cavity with a trocar and draw off the confined liquid drop by drop. This is undoubtedly wrong, and its disadvantages have been demonstrated in my own practice. The crucial incision is undoubtedly the best.

Dr. Collins related the details of a case treated in the manner of the text-books by exploratory needle, trocar, and drop by drop drainage. The cartilaginous membrane, acting as septum, was one and a half inches from the vulva and probably congenital. A crucial incision was made after drainage and the corners cut off; and no further trouble was experienced by the patient.

Dr. Montgomery, in closing the discussion, said: As Dr. Parish has said, the free incision is best, though it was precipitated in the case related by an opening occurring during examination.

The danger of septicæmia is certainly increased by a small opening. A particular point of interest in this case was the lateness in life, and the time that elapsed between the injury and the retention.

[The dangers of inflammation and septicæmia are, to a large extent, in proportion to the distention of the uterus and vagina. In cases seen before the distention is great, recovery may be expected from either method of treatment, if carefully employed; but in cases of long standing there is great danger, which cannot always be avoided by any kind of management. The question regarding the relative merits of rapid and slow evacuation of the menstrual fluid remains open for discussion.] A. J. C. S.

Rapid Dilatation of the Uterine Canal.

Dr. GOODELL read the following paper before the Philadelphia Medical Society :

For many years I enlarged or straightened the uterine canal, according to the requirements of the case, either by tents or by Sims's operation, and preferably by the former. Having had several serious warnings in the shape of inflammation following these operations, I began to perform them with fear and trembling. Yet nothing very untoward happened until the year 1878, when two grievous mishaps befell me.

A charming young lady, the centre of a large circle of admiring friends, came from a neighboring State to consult me about a dysmenorrhœa which grew worse and worse every year. The cervix was so bent forward, and the stenosis of its canal, *per se* as well as by angulation, was so marked, that I unhesitatingly performed Sims's operation. Within a few days septicæmia set in, soon the parotid glands swelled up, and

on the ninth day she died. True it is that, at the same time, two piles also were tied, but this latter operation I had, and have, performed so many times with impunity that I was, and am still, disposed to attribute the blood-poisoning to traumatism of the cervix and not to that of the rectum. Hardly had I time to recover from this bitter blow when a case of exhausting menorrhagia fell into my hands. The lady was the young bride of a husband well advanced in life, who doted on her as only old men dote on much younger wives. I dilated the cervical canal with tents and curetted many vegetations from the endometrium. A furious peritonitis set in, and in less than three days this young wife lay dead and the husband was frantic with grief.

The anguish which I felt at the death of these two ladies, and the heartrending scenes which I witnessed at their bedside,—scenes which I cannot now recall without emotion,—urged me to try any remedy that gave promise of efficiency combined with greater safety. In the search for a substitute, I tried rapid dilatation, which Ellinger and others had proposed, and since that year—that *annus iræ*—I have not once performed Sims's operation for dysmenorrhœa, and I have so narrowed the field for the use of tents that I now very rarely resort to them. In short, rapid dilatation has proved in my hands so safe and so efficient an operation that I wish to urge its claims before this society.

The instruments which I would recommend are two Ellinger dilators of different sizes. These are the best, on account of the parallel action of their blades. The smaller of these dilators has slender blades, and it pilots the way for the other, which is more powerful and with blades that do not feather. I have had the beaks of these dilators

changed from an obtuse angle to a slight curve, so that it can be reversed within the womb. The lighter instrument needs only a ratchet in the handles, but the stronger one should have a screw with which to bring the handles together. Lest the beak should hit the fundus uteri and seriously injure it when the instrument is opened, the blades are made no longer than two inches, and are armed with a shoulder which prevents further penetration. The larger instrument opens to an outside width of an inch and a half, and it has a graduated arc in the handles by which the divergence of the blades can be read off. The instruments which I now exhibit to you, and which I can recommend highly, have been made, under my supervision, by Messrs. J. H. Gemrig & Son, of this city.

In a case of dysmenorrhœa or of sterility from flexion or from stenosis, my mode of performing the operation of rapid dilatation is as follows: The patient is thoroughly anæsthetized, and a suppository containing one grain of the aqueous extract of opium is slipped into the rectum. She is then placed on her back and drawn to the edge of the bed, the knees being supported by her nurse. The light must be good, so that the operator may clearly see what he is about. By the aid of a strong tenaculum, applied through my bivalve speculum, the cervix is steadied and the smaller dilator is introduced as far as it will go. Upon gently stretching open that portion of the canal which it occupies, the stricture above so yields that when the instrument is closed it can be made to pass up higher. Thus by repetitions of this manœuvre, little by little, in a few minutes' time a cervical canal is tunneled out which before could not admit the finest probe. Should the os externum be a mere pinhole, or be too

small to admit the beak of the dilator, it is enlarged by the closed blades of a straight pair of scissors, which are introduced with a boring motion. As soon as the cavity of the womb is gained the handles are brought together. The small dilator being now withdrawn, the larger one is introduced and the handles are then slowly screwed together. If the flexion is very marked, this instrument, after being withdrawn, should be re-introduced with its curve reversed to that of the flexion, and the final dilatation then made. But in doing this the operator must take good care not to rotate the womb on its axis, and not to mistake the twist for a reversal of flexion. The ether is now withheld, and the dilator kept *in situ* until the patient begins to flinch, when the instrument is closed and removed. A few drops of blood trickle out of the os. Occasionally a slight flow of blood will last for several days after the operation, simulating the menstrual flux. Often this flux is precipitated or renewed if the operation follows or precedes it too soon. The best time for dilatation is, therefore, midway between two monthly periods.

When compared with the cutting operation, this one looks like rough usage, yet the woman rarely needs more than two or three suppositories, and complains merely of soreness for one or two days. To forestall any tendency to metritis, she is kept in bed until all tenderness has disappeared. Pain is met by rectal suppositories of opium and by large poultices laid over the abdomen. I have seen slight pelvic disturbance arise from this operation, but it has always been readily controlled and has not given alarm.

In the great majority of cases I dilate the canal, not to the fullest capacity of the instrument, but to one inch and a quarter. Sometimes in an infantile cer-

vix which does not readily yield and might give way, the handles are not screwed down more than three quarters of an inch or an inch. Tearing of the cervix has happened in two of my cases. In one, that of a virgin, the cervix was split half-way down to the vaginal junction. The other case was that of a multipara whose uterine canal had been nearly closed up by applications of silver nitrate, made by her physician, with the view of curing what he supposed was an "ulceration of the os," but which was a bilateral laceration. The tissues, rendered cicatricial and brittle by the caustic, were torn by the dilator for about half an inch on the right side also. Here the hemorrhage was free enough to need styptic applications and a tampon. I could have stopped it by wire sutures, but this was not done, as it would have defeated the object of the operation.

For slight dilatations, such as for the office treatment of ante flexions and of stenosis, or for the introduction of the curette, or of the applicator armed with cotton, the more delicate instrument is quite strong enough, and an anæsthetic is not needed. Sometimes, in a very sharply ante flexed womb, the dilator cannot be made to pass the os internum. This difficulty is overcome by first passing in a surgeon's probe, and then, along it as a guide, the dilator. After a forcible dilatation under ether, the cervical canal rarely returns to its previously angular or contracted condition. Since lateral extension of elastic bodies antagonizes their length, the cervix shortens and widens; and the plasma, provisionally thrown out by the submucous lesions sustained by the dilated part, serves still further to thicken and stiffen its tissues. In other words, the stem-like neck of the pear-shaped womb is shortened, widened, strengthened, and straightened.

Hence, for straightening out ante flexed or congenitally retro flexed wombs, and for dilating and shortening the canal in cases of sterility or dysmenorrhœa arising from stenosis or from a conical cervix, the dilator will be found a most efficient instrument. In its results it is not infallible; I have twice been obliged to repeat the operation, and would have liked to do so in several other cases had the woman permitted it.

Marriage and Mitral Stenosis.

The *Med. News* tells us that in a recent clinical lecture at *la Charité*, Dr. Landouzy stated that the mitral orifice is anatomically narrower in women. On the other hand, the hyperalkalinity of their blood leads to sclerosis. These conditions explain the frequency of mitral stenosis in woman. Nevertheless, as long as the left auricle, says the *Journal de Médecine*, remains in good condition, the primary lesion makes but little progress; but when the great vital test of pregnancy comes, there is danger.

Porak's statistics show that in gravidocardiac disorders, as they are called, more than two-thirds of the cases are those of mitral stenosis, mitral insufficiency, or the two combined. Obstetricians are agreed in advertising that a woman suffering with mitral disease, especially mitral stenosis, should not marry; or, being married, should not have a child; or, having given birth, she should not nurse. A woman with mitral disease having been married, and becoming a widow without having borne a child, is in a most favorable condition if she remains content with widowhood. So, too, religious celibates who preserve their continence may have mitral stenosis, and live to the age of grandmothers.

Landouzy mentions the case of a girl

who had been in the hospital under his care, and whom he had advised not to marry, but who disregarded his advice, married, became pregnant, and, after a miscarriage, died suddenly in an attack of asystole.

Of course, in cardiac disease, it is well to discourage marriage; but, in regard to such action, the old fable of Cupid being blind has countless illustrations, and at the bridal altar these very maidens, like other brides, deck themselves with orange flowers, the very symbol of fecundity—whether they know this or not—when they ought not to have a single pregnancy. But, when married, they are advised not to have children. How many women can control this matter? To avoid reproduction is very easy to advise, very difficult to do. Possibly, it might be well to counsel these cardiopathics to prepare for marriage by first undergoing Battey's operation. But when the wife is not sterilized in advance, a similar proposition might be made to the husband; and in the day when our gentle sisters become professors of diseases of the male sexual organs, possibly normal orchidectomy may occupy as important a place in the surgical therapeutics of man as normal ovariectomy now does in the diseases of woman.

However, we are not sanguine that either plan of treatment for the prevention of pregnancy will be adopted; but we are inclined to think that germicide solutions may continue to be in demand by cardiopatic wives.

Succus Alterans in Amenorrhœa.

Succus Alterans (MCDADE) has recently been used at the Woman's Hospital and Dispensary of Brooklyn, N.Y., in a case of amenorrhœa of several months' duration. The cause of the

amenorrhœa was at first supposed to be due to general debility of malarial origin. Subsequent investigation developed a marked syphilitic history. The case immediately improved on the exhibition of this remedy and was discharged cured in a comparatively short time.

Imperforate Hymen Opened without Antiseptic Precaution.

Dr. M. G. BIGGS reports this case, in the *Brit. Med. Jour.*: "E. S., aged 16, a servant, had never menstruated, although she was a well-formed girl. She had, however, suffered from pain at distinct intervals, and, when she sent for me, her mother said she had been in severe pain all the previous night, and was then so bad that she was rolling on the bed, and that the womb had come down externally. On examination, there was a distinct bluish membrane, with marked fluctuation; the only opening to be found was that of the urethra. A triangular piece was removed from the centre of the membrane, and there was an immediate rush of a considerable quantity of dark-colored discharge, with instant relief from the pain, which did not recur. When the discharge had ceased, the parts were covered with a piece of linen rag soaked in carbolic acid lotion (1 in 40), and this was ordered to be continued; but, as often happens in this class, the mother was somewhat careless, the rag was allowed to dry or to fall off, so that we may fairly say that there was a free access of non-carbolized air. She was kept in bed during the remainder of that day and the next, but there was no rise of temperature, and then she was allowed to get up and resume her work, which she did without any bad effects."

Retroversion with Congestion.

Dr. I. B. RUNLIN, in a clinical lecture published in *Med. Times* stated : This woman is unmarried, 21 years old, and for three months past has menstruated every two weeks, the flow continuing four or five days at a time. We have seen this patient before, and found the uterus out of place. She has menorrhagia, consequent upon congestion due to displacement. She had been in perfect health until, during one of her menstrual periods, by some strain or fall, the uterus was thrown backward. Sometimes a fall backward will cause such a displacement of the womb, and the organ remaining misplaced, will become congested from interference with its normal circulation.

If the uterus has not been retroverted very long, it can be thoroughly replaced, if the patient be otherwise in good health, and will sometimes remain in position. It is better to try a light tampon before resorting to the use of the pessary. Still, unless the case be very recent, it is rather the exception to find the uterus remain in its normal position after being replaced. This patient says that since she was here before, the bearing-down pain from which she had suffered had disappeared, and also the leucorrhœa. She has not yet passed a menstrual period since the displacement was reduced. Should the uterus not fall when it becomes congested at the monthly periods, and when she stands and walks, we may feel confident that it will remain reduced without the introduction of a pessary. It is better, however, that the patient retain the recumbent posture, on the bed or sofa, during the period. She states that she has been relieved of obstinate constipation since she came here for treatment. She had been in the habit of taking cathartics to effect a movement from the bowel. The

constipation was due to pressure of the displaced uterus upon the rectum behind, interfering with its normal functions. All this was relieved as soon as the uterus was thrown forward. In this case it was impossible to replace the uterus without the aid of the sound, which I consider justifiable if used very carefully. It is always better to do without it, if possible ; but it is useless simply to raise the uterus a little and allow it to drop back when the finger is withdrawn. In some cases the uterus will fall into place with very slight pressure if the woman is placed on the chest and knees and the vagina dilated with Sims's speculum. Beware of attempting too much at one time, and always insist on rest in the recumbent posture, on the side, for some hours afterward, as soon as the patient reaches her home.

Duration of Menstrual Hemorrhage.

In a paper on "The duration of the menstrual hemorrhage in relation to the development of the fœtus at term, and to multiple pregnancy," the author seeks to establish his conclusions on the basis of much statistical material collected in the clinics of Modena, Milan and Turin. He was led to this research by the idea that by the amenorrhea of pregnancy a so much greater quantity of maternal nourishment was retained for the benefit of the fœtus, as the sanguineous loss was greater in menstruation. Not being able to determine exactly the quantity lost at each period, he took its duration as a guide, which, considering the number of his observations, may be regarded as more or less equivalent. As to a longer duration of the menstrual hemorrhage, a corresponding ovarian activity can be supposed; so also the hypothesis may be justified of a more

easy rupture of more ovisacs, and a greater probability of multiple pregnancy. From the analysis of very numerous observations, PROFESSOR CUZZI thinks himself justified in formulating the following conclusions: (1) The weight and length of the fœtus at term are in direct relation with the number of days menstruation occupied. The longer the usual period of menstruation, the heavier and larger the fœtus. (2) There is a direct relation between multiple pregnancy and the duration of the menstrual period. That is, multiple pregnancy is most frequent in women in whom the period is long and the loss free.—*London Med. Record and American Med. Record.*

Anterior and Posterior Displacements of the Uterus—Their Treatment.

Dr. MACAN (*American Jour. Obstet.*) summarizes his studies thus :

1. The normal position of the uterus when the bladder is empty is one of ante flexion. Hence mechanical treatment of ante flexion is rarely called for, and if symptoms be present our efforts should generally be directed to the cure of the complication.

2. In retro flexion, or versions, the primary indication is to treat the displacement. In order to do this effectually we should place the uterus in a position of exaggerated antiversion, and then fix the cervix posteriorly by a pessary.

3. Hodge's pessary, or any other pessary used for the cure of retro flexion, when uncomplicated with adhesion, should act by fixing the cervix posteriorly, and not by pressing against the fundus and elevating it.

4. Versions are, so far, more serious than flexions, in that they are caused by rigidity of the uterine perenchyma,

which is generally due to chronic metritis.

5. To make the results of the bimanual examination of any use for comparison with the results of other observers, it must be made in the dorsal position, the bladder having been previously emptied.

6. A great deal of the confusion that exists about the treatment of anterior and posterior displacements originates in its being taken for granted that any treatment that is found suited to an anterior displacement must be equally suited to a posterior one, and *vice versa*.—*Detroit Lancet.*

Malformations in the Female Sexual Organs Caused by Arrest of Development.

This formed the regular subject of discussion for the evening and was opened with a paper by Dr. Browne. The following were Dr. B.'s conclusions:

1. Nearly all the malformations of the female sexual organs previous to puberty result from arrest of development.

2. As the upper and lower portions of Muller's ducts develop independently of each other we may find the ovaries develop without the uterus and *vice versa*.

3. Perfect development of the external genital organs and the mammary glands does not preclude defective development of the vagina, uterus or ovaries.

4. Entire absence of the uterus or of the ovaries can only be determined by post-mortem examination or by laparotomy.

5. A patulous urethra is not the result of sexual intercourse through this organ, but is caused by arrest of development.

6. In congenital atresia of the vagina, a patulous urethra is the rule; in acquired atresia it is the exception.

A Modification of the Method for Total Extirpation of the Uterus.

Prof. MÜLLER, of Berne, has modified the method for the total extirpation of the uterus, in the following manner: During the operation the abdominal aorta is compressed, and the uterus turned out through an incision in the posterior wall of the vagina. After securing the broad ligaments and vaginal tissues with provisional ligatures, the uterus is then divided vertically with knife and scissors into a right and a left half, each of which is drawn down and the ligaments secured just as in the treatment of pedicle of uterine polypi, the uterine tissues divided about one centimetre from the ligature. The wound in Douglas's pouch is not closed, nor is drainage employed, the only dressings being dry carbolized gauze and daily washing with corrosive sublimate.

In the four cases in which the author employed this procedure the result was perfectly satisfactory, probably from the very slight loss of blood which this method entails.—*Deutsche Med. Zeitung.*

Chronic Endometritis.

Dr. E. C. SMITH (*Atlantic Journal of Medicine*): Chronic endometritis (or chronic inflammation of the mucous membrane of the womb) may be considered according to the amount of tissue implicated:

1. As general where both the cavity and the neck participate alike in the inflammatory process.
2. As corporeal where the body is exclusively or predominantly involved.
3. Cervical where the neck alone is affected.

This chronic inflammation may follow an acute attack, or it may be from the first chronic, especially in anæmic, tubercular or scrofulous persons.

The secretion is of a puriform mucus, differing somewhat in tenacity in the cervix and cavity; the purulent element possibly predominating if the secretion be from the body, and the mucus if from the cervix.

We have the same state of serous infiltration and vascular congestion in the chronic as we have in the acute inflammation, but there are in addition a series of more profound changes, such as the formation of the ovula nabothi or distention of the small mucous follicles, situated in the interstices of the lining membrane of the cervix and cavity.

There is also an hypertrophy of the papillæ, and with it often polypous excrescences of the cervix, formed of vascular connective tissue or mucous tissue. These may reach several millimetres in length, and may project from the os uteri.

In untreated cases, the catarrhal fluid from the cavity or cervix may remain in contact with the lips of the womb, especially the posterior; and there results a growth at that point of the papillæ in the form of small granulations which seem to be composed of embryonic connective tissue traversed by myriads of blood-vessels. These granulations are pink or red in color, and when repair takes place they become covered with epithelium, and, on account of their embryonic structure, contract, become fibrous, and are finally buried beneath this newly-formed membrane.

The symptoms of this disease, in brief, are menstrual disorders, a profuse hemorrhage of a "glassy" character, which is more tenacious from the neck than the body, and is often blood-stained.

Pain in the back, extending to the hypogastrium and groins, and in complications down the thighs—*sympathetic nervous* disorders, such as headache, a

tendency to weep, a feeling of sadness, and hysterical symptoms generally.

The uterine probe passed into the cavity often shows a lengthening and a dilatation of the internal os. It creates more discomfort than in health. The uterus is likewise found to be more sensitive to the grasp.

Frequently there is nausea, and even vomiting and sterility is generally caused.

Dilatation of the os will confirm our diagnosis in corporeal, and examination with the speculum alone will lead us to a conclusion in cervical disease.

It seems to be a far more common disease with us than our text-books would have us suppose. It appears to be more common in the negro race than in the white—doubtless on account of their anæmic, tubercular, or scrofulous habit; their constant exposure to causes which are calculated, in the healthy, to excite an acute inflammation, and, for want of attention, it runs into the chronic form.

The prognosis of simple chronic endometritis without complications is fairly good if the treatment be promptly and correctly conducted.

The complications most frequently met with are displacements, vaginitis granular degeneration and pruritus vulvæ.

It is doubtless more frequently the cause of pyo-salpinx than the acute inflammation. The predisposing causes are generally classified as a tendency to scrofula, tuberculosis, spanæmia, exhaustion from parturition or laceration, and prolonged nervous depression.

The exciting causes are: exposure during menstruation, sudden checking of the menstrual flow, obstruction to the escape of menstrual blood, abortion, parturition, acute endometritis of any form, subinvolution, displacements producing great congestion, chronic pelvic

peritonitis, abuse of sexual intercourse, injuries of any kind, tumors and vaginitis.

The pre-existence of corporeal or cervical disease may also be considered a cause of general endometritis.

Its course depends upon many factors. The disease, as I have said, may be from the first chronic, and may last for years. There seems to be no self-limitation. We may always consider it a disease of weeks, not days.

The treatment should be hygienic, constitutional and local.

It is often, however, quite difficult, and frequently impossible, to analyze the symptoms of uterine troubles so fully as to establish a correct pathology, and, of course, the proper therapeutic indications.

Good hygiene is demanded in this as in all other diseases. The general system occasionally requires a laxative, diaphoretic or diuretic. But the indications are usually for tonics, owing to loss of appetite and the debility generally present.

Use such tonics as best suit the peculiarities of your patient.

A combination of the mineral and vegetable have been found as more generally applicable than either alone.

Local measures are most important, such as cleanliness, astringents and caustics.

For corporeal disease, tents followed by iodine, zinc salts, solid nitrate of silver, nitric acid, or pernitrate of mercury, on a probe, are recommended.

The fluid extract of hydrastis, applied through a uterine syringe, whose distal extremity has been wrapped with absorbent cotton, has acted well for me in a limited number of cases. Iodine is nicely applied in the same way. The iodoform pencils of Park Davis & Co. I have found especially applicable in

those cases in which there was a scrofulous diathesis. Tannin and acetate of lead are good applications for chronic endocervicitis.

Scarification of the os is sometimes found useful.

Scraping the inflamed membrane with a curette (blunt preferably), followed by application of iodine, carbolic or nitric acid or nitrate of silver, is called for in those cases where there is a constant hemorrhage present due to the congested condition of the papillæ and the polypoid growths.

A Case of Homicide by a Wound of the Vulva.

Dr. F. W. DRAPER reports a most interesting medico-legal case, in the *Boston Med. and Surg. Jour.* for Sept. 4, 1884, wherein within the space of five hours (taking outside limit of time) a strong, plethoric, and healthy woman bled to death by a wound of the vulva an inch long and half an inch deep. Such an occurrence, if standing alone as one observed for the first time, would be regarded as extraordinary, perhaps as incredible; but it is fortunate in being in accord with similar observations recorded in surgical and medico-legal writings. It is really a typical example of an interesting class. Ogston quotes the case of a woman who died in ten minutes after receiving two wounds about the genitals, one on the left labium and the other at the entrance of the vagina at its upper part; the fact that she was pregnant, and that the vascularity of the parts was thus increased, may have had some influence upon the rapidity of the hemorrhage. Taylor alludes to the case of a woman, eight months pregnant, who "fell from a chair, which also fell with her. There was hemorrhage, and she died in a quar-

ter of an hour. The blood had flowed from a wound an inch and a half long, situated between the right labium and the urethra." In another case "a contused wound of the clitoris proved fatal. A woman aged thirty-six received a kick from her husband in the lower part of the abdomen while she was in a stooping posture. When seen, in about three-quarters of an hour, she had lost from three to four pounds of blood; she was sinking, and expired a few minutes afterward. The wound was at the edge of the vulva, extending along the ramus of the pubes; it was about an inch long and three-quarters of an inch deep. The left crus clitoridis was crushed throughout its length." These cases are of use in teaching the medical witness that, whether in the presence of a jury or elsewhere, he should be economical in the use of terms like "impossible," or "incredible," or "inconceivable."

In the case reported by Dr. Draper, the jury found a verdict against the husband.—*Med. and Surg. Reporter.*

Albuminate of Iron as an Emmenagogue

is spoken of by Dr. ALBERT BLONDEL, in *l'Union Medicale*. After considering whether it can be strictly considered an emmenagogue or not, he details some clinical experiences. He says that iron can be hardly considered as among emmenagogues; but the administration of an appropriate ferruginous preparation gives excellent results in the majority of uterine affections and regulates menstruation, especially if it is taken in small doses, avoiding putting useless quantities in the stomach, which might irritate. In those cases especially, where the iron preparations react upon the stomach, the albuminate of iron is indicated. The elaborated albuminate be-

ing the ultimate combination that iron undergoes in the blood, it becomes of great value in symptomatic anemias. A very agreeable preparation can be made by combining it with the syrup of orange peel.—*Weekly Med. Review.*

Case of Fibroid Tumor of the Uterus with Sessile Attachment to the Fundus removed by Enucleation.

Dr. B. BERNARD BROWNE (*Maryland Med. Jour.*):

This patient, M. F., age 32 years, colored and unmarried, has never had a child or miscarriage; she commenced to menstruate at 15 years of age and enjoyed perfectly good health until about two years ago, when, during her menstrual period, she strained herself in lifting some heavy furniture, and felt something give way inside of her; the flow continued very free for a month, during which time she remained at her work, but the hemorrhage became so profuse that she was obliged to go to bed, remaining there six weeks, at the end of which time it had somewhat diminished.

From the time of the injury, however, she has suffered almost constant pain in the pelvis, and her menses, which had previously been regular and free from pain began to cause her great suffering, and for most of the time she has had both menorrhagia and metorrhagia. About a month after the injury she noticed a lump in the right inguinal region which she attributed to the strain. This lump, as you now observe, is quite prominent.

When I introduce my finger into the vagina it comes in contact with a large ulcerating mass resembling to the touch epithelioma of the cervix. I can, however, reach the anterior lip of the uterus, and can make out the protrusion of this

tumor through the cervix; upon passing a sound I find the cavity of the uterus measures $3\frac{1}{2}$ inches. I also find that the tissues around the uterus are not affected by any secondary inflammatory deposits, and that the uterus is forced or propped up out of the pelvis by the tumor, and that the lump in her side is really the fundus of the uterus thus forced out of the pelvis.

In this case we have very strongly pronounced symptoms of epithelioma—hemorrhage, pain, foul-smelling discharge, general emaciation and dirty yellow tint of the skin, indicative of profound alteration in the properties of the blood and of impaired nutrition; to the sense of touch, also, as I have said, it resembles very much uterine cancer and was well calculated to mislead her former attendant into the belief that it was this disease.

In this case the differential diagnosis of fibroid tumor is based upon the following facts:

1. Fibroid tumors are exceedingly common in the colored race and cancer is equally as rare.
2. Epithelioma of the cervix very rarely, if ever, occurs in women who have never been pregnant.
3. Cancer rarely begins at so early an age as 30 (the time at which the first symptoms appeared).
4. The uterus is never elevated out of the pelvis by epithelioma, but on the contrary is generally lower than normal.
5. In fibroid tumors the uterine cavity is frequently increased in length, whereas in epithelioma it is generally diminished.
6. Secondary inflammatory deposits in the surrounding tissues occur almost constantly in epithelioma, rarely in fibroids.
7. In epithelioma the tumor is never

felt protruding into and through the cervix and distinct from the cervical tissue as in this case.

There are several methods by which this tumor may be removed, three of which I will mention :

1. Cutting away with scissors, and removing it in pieces.
2. Surrounding the pedicle with the écraseur, and, after cutting through the pedicle, removing the tumor by traction.
3. By enucleation.

The last, enucleation, is the method I will adopt. The patient having been placed under ether and in the Sims' position, gradual traction is made upon the tumor by large vulsella forceps; while one pair holds the tumor down as far as possible, another pair is placed above, the pedicle of the tumor is thus put firmly on the stretch. Thomas' serrated scoop is now passed behind the tumor up to the fundus and by gradual leverage with a sawing motion the pedicle is *separated at its point of attachment to the uterus*, and no fragment of the pedicle is left behind as you will observe by examining the tumor which will now be shown you. Although there was an apparent pedicle previous to the operation it has retracted into, and is part of the tumor; and the broad base of attachment to the fundus is more than three inches in diameter.

If the écraseur had been used it might have divided the pedicle and left a portion of the tumor in the uterus, or it might have drawn within its grasp a portion of the fundus and thus cut out a slice of the uterus (this accident is most apt to happen where the tumor has a sessile attachment as in this case); whereas by the plan of enucleation the uterine attachment of the tumor is completely separated and no portion of it is left behind.

Upon introducing, now, my finger

into the uterus I find it completely empty—there is very little hemorrhage—the uterus and vagina will now be thoroughly washed out with hot carbolized water and the patient put to bed.

DISEASES OF CHILDREN.

Infant Feeding and the Summer Diseases of Children.

Dr. EARLE read an elaborate paper on this subject, dealing largely with the prepared foods to be found in the market. He summed up his conclusions as follows:

1. The most frequent infantile disease in the city during the summer months is entero-colitis.

2. Excluding causes of infant mortality largely beyond our control, improper feeding is one of the chief causes of the great number of deaths among this class.

3. Mothers should nurse their children. In lieu of this a wet-nurse should be procured. If this is impossible, a mixed diet should be resorted to.

4. Artificial foods containing considerable casin are found to be a cause of indigestion and summer disease.

5. In many cases, cow's milk, diluted with water, does not seem to agree with children. Barley-water or rice-water as the diluent seems to make a more physiological food.

6. Condensed milk seems to agree with a considerable number of children, but in many cases sufficient is not used to nourish a child. Used in proper quantities, and diluted with rice or barley-water, it is without doubt one of the best of artificial foods.

7. Cream, mutton broth, and white of eggs are valuable adjuncts in the diet of children.

8. Whatever the artificial food a child is having, the physician should examine it frequently for evidences that it is a proper food as regards quality and quantity. The normal elevation of the fontanelles and increasing weight are among the conditions denoting a satisfactory and favorable nutrition.—*N. Y. Med. Journal.*

Pulv. Anti-Chol. Infanti.

The following prescription, sent to us by P. W. BURDGE, M. D., of Rahway, N. J., is used at the Newark (N. J.) City Dispensary for cholera infantum: \mathcal{R} . Hydrag. sub mur., gr. ij.; pulv. ipecac, gr. iij.; pulv. plumbi acet, gr. viij.; pulv. doveri, gr. vj.; pulv. creta comp., \mathcal{D} ij. Mice, et ft. chart. No. xxiv.—*Med. World.*

Cholera Infantum.

Prof BARTHOLOW says no single remedy is more efficient than brandy in cholera infantum. It must be given in sufficient doses (half drachm) frequently repeated. It may be administered in a little water *without sugar*.—*Col. & Clin. Record.*

Treatment of Cholera Infantum.

Dr. FRANCIS A. EVANS writes to *Medical World* as follows: If the pulse is small and rapid, extremities cool, and pupils dilated, tongue elongated, edges red, I give: \mathcal{R} . Aconite tinct, (root), gtt.x.; belladonna tinct. gtt. vi.; aqua dest., \mathfrak{z} iv. M. Dose, one teaspoonful every hour. After tenth dose suspend for six hours, and give during interval one drop tr. ipecac alternating with one drop tr. epilobium, every half hour. If there is much regurgitation of food, give: \mathcal{R} . Calomel, gr. j.; bicarb. sodæ, gr. xii.; M. Divide into twelve powders and give

one every three or four hours. Or what is just as good: \mathcal{R} . Podophyllin, gr. i.; pure white sugar, gr. xx.; M. Divide into twenty powders and give as above. I sometimes use charcoal in place of podophyllin with good results. I also stop the ipecac sometimes after tenth dose and give in its place tr. rhei in same size dose. If, in another condition I find a full and frequent pulse, flushed face, eyes bright, (less danger here) I prescribe: \mathcal{R} . Tr. Gelsemium (green root), gtt. xx.; tr. verat. vir., gtt. x.; aqua dist., \mathfrak{z} iv. M. Sig. Teaspoonful every hour. Tr. nuc. vom. in $\frac{1}{4}$ drop doses every two hours will quiet the pain in the bowels.

Cholera Infantum.

\mathcal{R} . Bismuth subnit. \mathfrak{z} jj.; pepsin, grs. xvj.; creasote, mjj.; tr. opii camph.; spts. ammon. aromat., āa \mathfrak{z} ss.; syr. simp., \mathfrak{z} ss.; aq. ad., \mathfrak{z} jj. M. Sig. \mathfrak{z} i. every two hours.

A Simple Remedy in Diarrhœa.

In the late summer and autumn, when fruit is so abundant, any simple remedy for diarrhœa, and what is familiarly called "bowel complaint," is worth knowing and remembering. Such a one was recommended by Dr. T. E. STELLWAGEN several years ago in his edition of Coleman's "Dental Surgery," and more recently in the pages of one of the journals. It is simply *vinegar*, preferably sound cider vinegar. The dose is about two ounces for an adult, and should be swallowed "neat"—without admixture of water.

It may also be given to infants with excellent results. To a babe a year old a teaspoonful of moderately-diluted vinegar would be the proper dose.

Its effect is to check pain, tenesmus, and tormina at once, to relieve the chill and

cramps when present, and to disseminate a feeling of warmth and comfort over the body.

Even in cases of chronic diarrhœa which have long resisted treatment, this household remedy has succeeded in checking the discharges and correcting the sub-inflammatory condition of the membranes.

We shall be glad to report any experiences, favorable or otherwise, which our readers may have with this remedy.

—*Med. and Surg. Reporter.*

Some Formulæ for Irritative Diarrhœa.

At this time of the year when irritative diarrhœa is so very common and so apt to prove serious among children, we are pleased to note some formulæ that have been found very useful by Dr. E. H. BARTLEY (*New York Med. Jour.*): \mathcal{R} Ol. ricini, f. 3 iv.; bismuth. subnitrat, 3 ij.; magnes. carbonatis, 3 j.; sacchari, 3 ij.; ol. anisi vel ol. menth. pip., \mathfrak{M} vj. M. Sig. 3 j. for a child of six months to one year. Or we may use: \mathcal{R} . Vin. pepsini, f. 3 jss.; bismuth. subnit., 3 ij.; glycerini, 3 iv. M. Sig. 3 j. at a dose.

Dr. Mecray, of Cape May, New Jersey, highly recommends the following: \mathcal{R} Ol. ricini, 3 iv.; tr. opii, gtt. iv.; pulv. acac.; sac. alb., q. s.; aq. menth. pip., ad. 3 ij. M. Sig. Dessert-spoonful every three hours.—*Ibid.*

A New Form of Cuirass for Pott's Disease in Young Children.

As a substitute for the plaster-of-Paris jacket Prof. H. C. WYMAN (*Medical Age*) has devised a method of treatment which is briefly as follows: The child being placed in such position that the spine is extended to nearly the normal limit, a piece of Canton flannel large

enough to cover one third of the circumference of the trunk is laid on the back. A sheet of absorbent cotton having been placed over this, a cheese-cloth bandage six inches wide and several yards long, with the meshes carefully filled with plaster-of-Paris, is dipped in water and folded lengthwise over the whole. When rubbed smooth with the hand, so that it is perfectly adapted to the contour of the parts, a bandage is applied around the trunk, with figure-of-8 turns about the shoulders and pelvis, and the plaster allowed to set. The jacket thus constructed is in the form of a split, and can be removed every night.—*Ibid.*

Cholera Infantum.

\mathcal{R} . Pulv. opii, gr. ij.; ammon. brom., 3 j.; bismuth subnit., 3 ij. M. Ft. chart. No. xxxij. Sig. One powder to be given every two hours in a little sweetened water.—*Med. Herald.*

OBSTETRICS.

Partial Inversion of the Uterus, After Miscarriage at Three Months.

Dr. C. SMITH: Various authors that I have been able to consult, describe inversion of the uterus after labor at full term of uterogestation, but none speak of such a condition as liable to occur as early as three months. That such an unfavorable complication can, and does sometimes take place after abortion as early as three months, I am satisfied from a recent case in my practice.

July 21st I was called to see Mrs. P—, age 23. Sanguine temperament, fourth pregnancy and second miscarriage; the

first one occurring in February last. Upon my arrival I found she had been delivered of a fœtus and placenta. For half an hour after this she had severe hemorrhage with quite hard pain. I at once gave orders to elevate the foot of the bed, and lower the patient's head, after which I administered thirty drops of flu. ex. ergot. Hemorrhage still continuing, cold compresses were used with the desired result of checking the flow of blood. After remaining about an hour, and thinking all danger over for the present, I left, giving instructions to call me should any unfavorable symptoms present themselves. In about four hours I was summoned, the messenger stating that Mrs. P. was dying. I soon drove the five miles to the house of my patient, and found her recovering from a fit of syncope. The attendants stated that she had been having a very severe hemorrhage with hard labor-like pains. They had succeeded in checking the flow of blood with the same remedies I had used earlier. I made an examination, and found the fundus of the uterus presenting at the os. Abdominal pulsation revealed the absence of the uterine tumor. Pressure through the os caused the fundus to recede, but would follow the finger when withdrawn.

I then took a silver catheter, and by covering the end with a ball of cotton, and over this a piece of fine muslin, and lastly fastening them securely with a strong thread, thus improvising a probang, I oiled and inserted this within the os uteri, in the interval between the pains (as they came again with the hemorrhage). Making steady pressure I had the satisfaction of feeling the fundus spring into its normal position with a sensation similar to that of a rubber ball after being indented by the finger. The patient at once experienced a relief from pain, the flow was reduced to the

amount usually following cases of this kind.

At this present writing, fourteen days after, the patient was able to sit up, and walk about the house, although somewhat anæmic. *Physicians' and Surgeons' Jour. and Gazette.*

[We beg to call the writer's attention to the recent paper of Dr. J. C. Reeve, on "Moot Points in regard to Inversion of the Uterus," an abstract of which will be found in the November number of the DIGEST. He will there learn that the possibility of *inversio uteri* has been recognized, not only after abortion but even in the non-gravid uterus]

Muriate of Cocaine in Labor.

Dr. J. R. UHLER : For some years I have been in the habit of using dilute solutions and ointments of carbolic acid, both as disinfectants during examinations and to mitigate the pains of labor, but lately have thought that local anæsthesia can be more thoroughly induced by the employment of muriate of cocaine, either in solution alone or associated with dilute carbolic acid. A few days ago I had an opportunity of testing it upon a multipara, during the birth of her seventh child ; and, though the quantity of two per cent. solution employed was small, and the difficulties of keeping it *in situ*, owing to discharges, great, yet the results were satisfactory enough to encourage us to give it further clinical trial.

The case was not seen until the neck of the uterus was well dilated, nor was any of the drug purposely applied to the os, but at each examination after the discharge of the amniotic fluid, a few drops of the watery solution were smeared by the index finger around the labia and vagina, producing anæsthesia in spots, but more on the anterior than

the posterior portions, probably because the drug in this situation, with the patient on her back, was not so readily washed away.

The uterine pains did not seem to be interfered with, but owing to anæsthesia of the vaginal walls, the voluntary straining efforts of the patient were not so prolonged as they had been in the other labor in which I had attended her, nor was the last pain severe enough to make her cry. Had the case been seen earlier, and the drug been used of greater strength and more freely, or been applied in such a manner as to prevent its being washed away by the discharges, a still better result would no doubt have been produced. As it was the case ended rapidly and very satisfactorily to both mother and child, and the former did not suffer from the after-soreness, which is such a common accompaniment of ordinary labor.—*Med. Med. Journal.*

Treatment of Puerperal Fever by Cold Baths.

This subject was discussed by Prof. VINCENT, of Lyons, before the late International Medical Congress, who said :

1. That the administration of cold baths was practicable with the recently delivered, attacked with puerperal fever.
2. That cold baths were free from danger in the puerperal state.
3. They had a certain and quick anti-febrile effect in the sequelæ of delivery.
4. Recovery from puerperal fever was the rule with treatment by baths of proper temperature and methodically administered.
5. Cold baths were indicated in all high temperature forms of after-complications of child-birth, the very acute peritonitis excepted. The indication

for cold baths did not arise except where the fever was kept up, without notable morning remission, to about 40° cent., when the powerlessness of quinine and diffusible stimulants in full doses had been shown, and when, in fine, the lochia were fœtid, and intra-uterine injections had been fairly tried without bringing a fall in the febrile condition.

6. Cold baths should be administered at a temperature varying from 28° or 18°, cent.; according to the fall secured by the first bath given at 28° or 30°, the temperature of the subsequent baths should be reduced. (The rule was to get with a cold or tepid bath a fall of from one or two degrees in the patient's temperature.) The method used in typhoid fever, treated by cold baths after the system of Dr. Brand, should be followed, with modifications.

7. The cold baths were repeated every three hours until the temperature had fallen to 38°, and stayed there, with only ascending oscillations of some tenths in the evening.

8. When baths of 18° or 20° cent., repeated every three hours; night and day, did not bring about a notable reduction of temperature, a large ice-bag should be placed, in the intervals of the baths, on the abdomen of the patient.

9. Along with cold baths and ice-bags, spirits and tonics should be freely administered; the patients should be fed with liquid or semi-liquid foods, having much nutriment in a small bulk—soups, beef-tea, American broth, milk, etc.—*Med. and Surg. Reporter.*

[Our experience has not been altogether favorable to this practice. In a certain proportion of cases it has proved powerless for good, and in others apparently potent for harm.]—J.

